

Data File S1: Individual De-identified Subject Demographic Data

Patient ID	Age (yr)	Gender	Race	Historical cPRA	Baseline cPRA	# Pregnancies	# Previous Transfusions
100	38	Male	Black or African American	97	94		0
101	45	Female	Black or African American			2	0
102	63	Male	White	97	96		0
103	39	Female	Black or African American	100	100	1	0
104	41	Male	Black or African American	93	72		0
105	54	Female	White	100	100	4	0
106	42	Female	Black or African American			5	0
107	50	Female	Black or African American	62	60	2	0
108	59	Female	Black or African American	100	100	3	0
109	39	Male	Black or African American	100	100		1
110	39	Female	Black or African American			1	0
111	37	Male	White	99	97		0
112	25	Male	Black or African American	93	93		1
113	38	Female	Black or African American	98	94	4	0
114	53	Male	White				0
115	45	Female	White	100	99	1	0
116	58	Female	Black or African American	97	98	3	0
117	24	Male	White	99	88		0
118	58	Male	Black or African American	100	99		2
119	38	Female	Asian	98	92	1	0
120	59	Female	Black or African American	97	97	2	0
121	31	Female	White	100	97	0	0
122	55	Female	White			4	0

Data File S2. Transplant Related Subject Demographic Data

Patient ID	Year of Transplant	Organ Type	Transplant Period	Days since last tabalumab dose
100	1987	Living related donor	Before Study	
102	2002	Living related donor	Before Study	
102	2012	Cadaveric transplant	During Study	134
103	1995	Living related donor	Before Study	
104	2007	Living non-related d	Before Study	
105	2005	Living related donor	Before Study	
108	1994	Cadaveric transplant	Before Study	
109	1987	Cadaveric transplant	Before Study	
109	1997	Cadaveric transplant	Before Study	
111	1990	Living related donor	Before Study	
111	2001	Living related donor	Before Study	
111	2012	Cadaveric transplant	During Study	265
112	2003	Cadaveric transplant	Before Study	
113	1995	Living related donor	Before Study	
113	2012	Cadaveric transplant	During Study	267
115	1998	Cadaveric transplant	Before Study	
116	1999	Cadaveric transplant	Before Study	
117	2005	Cadaveric transplant	Before Study	
118	2005	Cadaveric transplant	Before Study	
119	1995	Living related donor	Before Study	
120	2009	Cadaveric transplant	Before Study	
121	1999	Living related donor	Before Study	
121	2006	Cadaveric transplant	Before Study	

Data File S3: cPRA Data by Subject over Entire Study Period

Patient ID	Study Week	cPRA	cPRA arcsine transformed
100	0	94	1.22263031
100	8	94	1.22263031
100	16	90	1.11976951
100	24	94	1.22263031
100	36	89	1.09734517
100	52	89	1.09734517
100	64	89	1.09734517
100	76	91	1.14328406
102	0	96	1.28700222
102	8	96	1.28700222
102	16	92	1.16808049
102	24	90	1.11976951
102	36	89	1.09734517
102	36	95	1.2532359
102	52	89	1.09734517
102	64	89	1.09734517
103	0	100	1.57079633
103	8	100	1.57079633
103	16	100	1.57079633
103	24	99	1.42925685
103	36	99	1.42925685
103	52	99	1.42925685
103	64	99	1.42925685
103	76	99	1.42925685
104	0	72	0.80380232
104	8	72	0.80380232
104	16	72	0.80380232
104	24	72	0.80380232
104	36	72	0.80380232
104	52	72	0.80380232
104	64	72	0.80380232
104	76	72	0.80380232
105	0	100	1.57079633
105	8	100	1.57079633
105	16	100	1.57079633
105	24	100	1.57079633
105	36	100	1.57079633
105	52	100	1.57079633
105	64	100	1.57079633
105	76	100	1.57079633
107	0	60	0.64350111
107	8	60	0.64350111
107	16	60	0.64350111
107	24	60	0.64350111
107	36	60	0.64350111
107	52	60	0.64350111

107	64	60	0.64350111
108	0	100	1.57079633
108	8	100	1.57079633
108	36	100	1.57079633
108	52	100	1.57079633
108	64	100	1.57079633
108	76	100	1.57079633
109	0	100	1.57079633
109	8	100	1.57079633
109	16	100	1.57079633
109	24	100	1.57079633
109	36	99	1.42925685
109	52	100	1.57079633
109	64	100	1.57079633
109	76	100	1.57079633
111	0	97	1.32523081
111	8	97	1.32523081
111	16	90	1.11976951
111	24	91	1.14328406
111	36	97	1.32523081
111	52	92	1.16808049
111	64	84	0.99728322
111	76	86	1.03526967
112	0	93	1.19441284
112	8	93	1.19441284
112	16	93	1.19441284
112	24	NA	NA
112	36	93	1.19441284
112	52	100	1.57079633
112	64	98	1.37046148
112	76	97	1.32523081
113	0	94	1.22263031
113	8	93	1.19441284
113	16	93	1.19441284
113	24	94	1.22263031
113	36	93	1.19441284
113	52	93	1.19441284
113	64	89	1.09734517
113	76	67	0.73420879
115	0	99	1.42925685
115	8	99	1.42925685
115	16	99	1.42925685
115	24	99	1.42925685
116	0	98	1.37046148
116	8	98	1.37046148
116	16	98	1.37046148
116	24	95	1.2532359

116	36	95	1.2532359
116	52	95	1.2532359
116	64	94	1.22263031
116	76	94	1.22263031
117	0	88	1.0758622
117	8	88	1.0758622
117	16	79	0.910809
117	24	88	1.0758622
117	36	79	0.910809
117	52	95	1.2532359
117	64	95	1.2532359
117	76	94	1.22263031
118	0	99	1.42925685
118	8	88	1.0758622
118	16	88	1.0758622
118	24	88	1.0758622
118	36	88	1.0758622
118	52	99	1.42925685
118	64	99	1.42925685
118	76	99	1.42925685
119	0	92	1.16808049
119	8	91	1.14328406
119	16	91	1.14328406
119	24	92	1.16808049
119	36	91	1.14328406
119	52	91	1.14328406
119	64	90	1.11976951
119	76	90	1.11976951
120	0	97	1.32523081
120	8	97	1.32523081
120	16	97	1.32523081
120	24	97	1.32523081
120	36	97	1.32523081
120	52	97	1.32523081
120	64	94	1.22263031
120	76	94	1.22263031
121	0	97	1.32523081
121	8	97	1.32523081
121	16	97	1.32523081
121	24	97	1.32523081
121	24	NA	NA
121	36	96	1.28700222
121	52	97	1.32523081
121	64	96	1.28700222
121	76	96	1.28700222

Data File S4: BAFF (total, bound+unbound) Concentration Data by Subject over Entire Study Period

Patient ID	Study Week	[BAFF]	units
100	0	912	picogram/milliliter
100	8	42058	picogram/milliliter
100	16	71099	picogram/milliliter
100	24	85831	picogram/milliliter
100	36	81828	picogram/milliliter
100	52	6913	picogram/milliliter
100	64	2837	picogram/milliliter
100	76	1303	picogram/milliliter
102	0	941	picogram/milliliter
102	8	124508	picogram/milliliter
102	16	100256	picogram/milliliter
102	24	102586	picogram/milliliter
102	36	32118	picogram/milliliter
102	52	4667	picogram/milliliter
102	64	2595	picogram/milliliter
103	0	1557	picogram/milliliter
103	8	85171	picogram/milliliter
103	16	78540	picogram/milliliter
103	24	84115	picogram/milliliter
103	36	73247	picogram/milliliter
103	52	12107	picogram/milliliter
103	64	4173	picogram/milliliter
103	76	3016	picogram/milliliter
104	0	525	picogram/milliliter
104	1	48547	picogram/milliliter
104	4	64020	picogram/milliliter
104	8	62219	picogram/milliliter
104	16	70435	picogram/milliliter
104	24	72728	picogram/milliliter
104	36	56179	picogram/milliliter
104	52	5807	picogram/milliliter
104	64	1073	picogram/milliliter
104	76	874	picogram/milliliter
105	0	1538	picogram/milliliter
105	1	86694	picogram/milliliter
105	4	123760	picogram/milliliter
105	8	124914	picogram/milliliter
105	16	126294	picogram/milliliter
105	24	106216	picogram/milliliter
105	36	22674	picogram/milliliter
105	52	3421	picogram/milliliter
105	64	3225	picogram/milliliter
105	76	2392	picogram/milliliter
107	0	672	picogram/milliliter
107	8	88350	picogram/milliliter
107	16	75096	picogram/milliliter

107	24	77837 picogram/milliliter
107	36	75483 picogram/milliliter
107	52	2855 picogram/milliliter
107	64	936 picogram/milliliter
108	0	1674 picogram/milliliter
108	8	120638 picogram/milliliter
108	36	101524 picogram/milliliter
108	52	6025 picogram/milliliter
108	64	3632 picogram/milliliter
108	76	1854 picogram/milliliter
109	0	489 picogram/milliliter
109	8	81318 picogram/milliliter
109	16	76701 picogram/milliliter
109	24	77357 picogram/milliliter
109	52	948 picogram/milliliter
109	64	562 picogram/milliliter
109	76	862 picogram/milliliter
111	0	577 picogram/milliliter
111	8	129633 picogram/milliliter
111	16	107995 picogram/milliliter
111	24	129020 picogram/milliliter
111	36	105438 picogram/milliliter
111	52	24551 picogram/milliliter
111	64	1083 picogram/milliliter
111	76	756 picogram/milliliter
112	0	2056 picogram/milliliter
112	1	81776 picogram/milliliter
112	4	101302 picogram/milliliter
112	8	96197 picogram/milliliter
112	16	96500 picogram/milliliter
112	24	110298 picogram/milliliter
112	36	7508 picogram/milliliter
112	52	11051 picogram/milliliter
112	64	2781 picogram/milliliter
112	76	2703 picogram/milliliter
113	0	738 picogram/milliliter
113	8	73919 picogram/milliliter
113	16	76689 picogram/milliliter
113	24	76104 picogram/milliliter
113	52	13706 picogram/milliliter
113	64	1422 picogram/milliliter
113	76	1302 picogram/milliliter
115	0	3312 picogram/milliliter
115	8	111844 picogram/milliliter
115	16	104687 picogram/milliliter
115	24	109886 picogram/milliliter
116	0	454 picogram/milliliter

116	8	52032 picogram/milliliter
116	16	53654 picogram/milliliter
116	24	51493 picogram/milliliter
116	36	59108 picogram/milliliter
116	52	1828 picogram/milliliter
116	64	1968 picogram/milliliter
116	76	678 picogram/milliliter
117	0	1277 picogram/milliliter
117	1	50226 picogram/milliliter
117	4	49292 picogram/milliliter
117	8	49010 picogram/milliliter
117	16	56728 picogram/milliliter
117	24	56461 picogram/milliliter
117	36	54546 picogram/milliliter
117	52	22154 picogram/milliliter
117	64	3941 picogram/milliliter
117	76	2497 picogram/milliliter
118	0	869 picogram/milliliter
118	1	37462 picogram/milliliter
118	4	41885 picogram/milliliter
118	8	42708 picogram/milliliter
118	16	44527 picogram/milliliter
118	24	42264 picogram/milliliter
118	36	41887 picogram/milliliter
118	52	6992 picogram/milliliter
118	64	2146 picogram/milliliter
118	76	1243 picogram/milliliter
119	0	1574 picogram/milliliter
119	16	88115 picogram/milliliter
119	24	102838 picogram/milliliter
119	36	74051 picogram/milliliter
119	52	1959 picogram/milliliter
119	64	1234 picogram/milliliter
119	76	1303 picogram/milliliter
120	0	947 picogram/milliliter
120	8	120365 picogram/milliliter
120	16	133892 picogram/milliliter
120	24	99924 picogram/milliliter
120	36	24750 picogram/milliliter
120	52	1124 picogram/milliliter
120	64	965 picogram/milliliter
120	76	927 picogram/milliliter
121	0	864 picogram/milliliter
121	8	161801 picogram/milliliter
121	36	136338 picogram/milliliter
121	52	17915 picogram/milliliter
121	64	3117 picogram/milliliter

121

76

1838 picogram/milliliter

Data File S5: HLA Single Antigen Data by Subject over Entire Study Period

Patient ID	Study Week	antigen	allele	HLA Class	MFI
100	0	A25	A*25:01	I	16259.09
100	8	A25	A*25:01	I	13317.87
100	16	A25	A*25:01	I	11562.06
100	24	A25	A*25:01	I	12793.49
100	36	A25	A*25:01	I	12120.52
100	52	A25	A*25:01	I	14039.3
100	64	A25	A*25:01	I	13095.74
100	76	A25	A*25:01	I	11105.11
100	0	A26	A*26:01	I	14795.7
100	8	A26	A*26:01	I	13370.17
100	16	A26	A*26:01	I	11325.93
100	24	A26	A*26:01	I	12132.28
100	36	A26	A*26:01	I	11705.88
100	52	A26	A*26:01	I	14331.91
100	64	A26	A*26:01	I	13651.11
100	76	A26	A*26:01	I	10864.34
100	0	A80	A*80:01	I	16261.22
100	8	A80	A*80:01	I	13935.33
100	16	A80	A*80:01	I	12302.58
100	24	A80	A*80:01	I	13741.18
100	36	A80	A*80:01	I	12068.59
100	52	A80	A*80:01	I	15201.91
100	64	A80	A*80:01	I	14319.67
100	76	A80	A*80:01	I	12486.84
100	0	B52Bw4	B*52:01	I	15295.13
100	8	B52Bw4	B*52:01	I	15156.24
100	16	B52Bw4	B*52:01	I	13121.62
100	24	B52Bw4	B*52:01	I	11706.27
100	36	B52Bw4	B*52:01	I	12655.16
100	52	B52Bw4	B*52:01	I	12776.02
100	64	B52Bw4	B*52:01	I	12658.48
100	76	B52Bw4	B*52:01	I	10806.04
100	0	B73Bw6	B*73:01	I	17459.07
100	8	B73Bw6	B*73:01	I	17102.43
100	16	B73Bw6	B*73:01	I	15436.24
100	24	B73Bw6	B*73:01	I	15564.79
100	36	B73Bw6	B*73:01	I	15709.58
100	52	B73Bw6	B*73:01	I	18571.18
100	64	B73Bw6	B*73:01	I	17680.22
100	76	B73Bw6	B*73:01	I	15565.23
100	0	Cw15	C*15:02	I	17129.86
100	8	Cw15	C*15:02	I	18660.58
100	16	Cw15	C*15:02	I	17173.55
100	24	Cw15	C*15:02	I	17436.34
100	36	Cw15	C*15:02	I	16274.08
100	52	Cw15	C*15:02	I	18793.46

100	64	Cw15	C*15:02	I	18903.59
100	76	Cw15	C*15:02	I	17562.21
100	0	Cw18	C*18:02	I	19485.06
100	8	Cw18	C*18:02	I	17677.44
100	16	Cw18	C*18:02	I	15828.21
100	24	Cw18	C*18:02	I	17581.56
100	36	Cw18	C*18:02	I	15031.19
100	52	Cw18	C*18:02	I	18194.7
100	64	Cw18	C*18:02	I	18155.11
100	76	Cw18	C*18:02	I	17547.93
100	0	Cw2	C*02:02	I	14975.61
100	8	Cw2	C*02:02	I	16615.15
100	16	Cw2	C*02:02	I	16929.75
100	24	Cw2	C*02:02	I	16070.15
100	36	Cw2	C*02:02	I	17367.94
100	52	Cw2	C*02:02	I	17529.11
100	64	Cw2	C*02:02	I	16970.35
100	76	Cw2	C*02:02	I	16900.18
100	0	Cw4	C*04:01	I	15098.45
100	8	Cw4	C*04:01	I	16592.95
100	16	Cw4	C*04:01	I	16738.15
100	24	Cw4	C*04:01	I	13405.19
100	36	Cw4	C*04:01	I	16621.64
100	52	Cw4	C*04:01	I	17024.71
100	64	Cw4	C*04:01	I	16157.2
100	76	Cw4	C*04:01	I	16417.86
100	0	Cw6	C*06:02	I	17847.75
100	8	Cw6	C*06:02	I	19051.72
100	16	Cw6	C*06:02	I	17840.33
100	24	Cw6	C*06:02	I	16626.25
100	36	Cw6	C*06:02	I	17184.86
100	52	Cw6	C*06:02	I	19311.62
100	64	Cw6	C*06:02	I	19155.29
100	76	Cw6	C*06:02	I	17757.07
100	0	DQ2	DQA1*05:01DQB1*02:01	II	20528.13
100	8	DQ2	DQA1*05:01DQB1*02:01	II	20334.93
100	16	DQ2	DQA1*05:01DQB1*02:01	II	13565.52
100	24	DQ2	DQA1*05:01DQB1*02:01	II	21732.57
100	36	DQ2	DQA1*05:01DQB1*02:01	II	16398.89
100	52	DQ2	DQA1*05:01DQB1*02:01	II	19381.36
100	64	DQ2	DQA1*05:01DQB1*02:01	II	18874.05
100	76	DQ2	DQA1*05:01DQB1*02:01	II	19703
100	0	DQ6	DQA1*01:02DQB1*06:09	II	18190.97
100	8	DQ6	DQA1*01:02DQB1*06:09	II	15899.87
100	16	DQ6	DQA1*01:02DQB1*06:09	II	11162.99
100	24	DQ6	DQA1*01:02DQB1*06:09	II	19028.39
100	36	DQ6	DQA1*01:02DQB1*06:09	II	11514.09

100	52	DQ6	DQA1*01:02DQB1*06:09		15960.1
100	64	DQ6	DQA1*01:02DQB1*06:09		16058.36
100	76	DQ6	DQA1*01:02DQB1*06:09		14300
100	0	DQ7	DQA1*02:01DQB1*03:01		20179.76
100	8	DQ7	DQA1*02:01DQB1*03:01		17005.62
100	16	DQ7	DQA1*02:01DQB1*03:01		10400.99
100	24	DQ7	DQA1*02:01DQB1*03:01		22250.99
100	36	DQ7	DQA1*02:01DQB1*03:01		12467.67
100	52	DQ7	DQA1*02:01DQB1*03:01		16650.44
100	64	DQ7	DQA1*02:01DQB1*03:01		18556.58
100	76	DQ7	DQA1*02:01DQB1*03:01		18926
100	0	DQ8	DQA1*02:01DQB1*03:02		19733.35
100	8	DQ8	DQA1*02:01DQB1*03:02		18163.04
100	16	DQ8	DQA1*02:01DQB1*03:02		13222.42
100	24	DQ8	DQA1*02:01DQB1*03:02		20910.91
100	36	DQ8	DQA1*02:01DQB1*03:02		15222.9
100	52	DQ8	DQA1*02:01DQB1*03:02		17651.22
100	64	DQ8	DQA1*02:01DQB1*03:02		18271.5
100	76	DQ8	DQA1*02:01DQB1*03:02		18119
100	0	DQ9	DQA1*03:01DQB1*03:03		19563.74
100	8	DQ9	DQA1*03:01DQB1*03:03		18705.41
100	16	DQ9	DQA1*03:01DQB1*03:03		12442.36
100	24	DQ9	DQA1*03:01DQB1*03:03		21853.27
100	36	DQ9	DQA1*03:01DQB1*03:03		14712.64
100	52	DQ9	DQA1*03:01DQB1*03:03		18660.39
100	64	DQ9	DQA1*03:01DQB1*03:03		19102.53
100	76	DQ9	DQA1*03:01DQB1*03:03		19107
100	0	DR12	DRB1*12:02		17237.72
100	8	DR12	DRB1*12:02		18253.76
100	16	DR12	DRB1*12:02		12418.8
100	24	DR12	DRB1*12:02		16253.57
100	36	DR12	DRB1*12:02		13846.88
100	52	DR12	DRB1*12:02		15969.21
100	64	DR12	DRB1*12:02		15638.17
100	76	DR12	DRB1*12:02		13379
100	0	DR14	DRB1*14:01		12936.11
100	8	DR14	DRB1*14:01		13377.8
100	16	DR14	DRB1*14:01		8173.71
100	24	DR14	DRB1*14:01		11117.09
100	36	DR14	DRB1*14:01		8499.05
100	52	DR14	DRB1*14:01		11049.95
100	64	DR14	DRB1*14:01		10505.82
100	76	DR14	DRB1*14:01		9441
100	0	DR52	DRB3*01:01		18305.08
100	8	DR52	DRB3*01:01		18917.78
100	16	DR52	DRB3*01:01		14230.02
100	24	DR52	DRB3*01:01		18168.99

100	36	DR52	DRB3*01:01	II	14847.09
100	52	DR52	DRB3*01:01	II	16590.27
100	64	DR52	DRB3*01:01	II	17035.39
100	76	DR52	DRB3*01:01	II	16357
100	0	DR7	DRB1*07:01	II	14795.8
100	8	DR7	DRB1*07:01	II	14799.75
100	16	DR7	DRB1*07:01	II	9935.43
100	24	DR7	DRB1*07:01	II	12631.6
100	36	DR7	DRB1*07:01	II	11098.32
100	52	DR7	DRB1*07:01	II	12580
100	64	DR7	DRB1*07:01	II	12592.4
100	76	DR7	DRB1*07:01	II	11013
100	0	DR9	DRB1*09:01	II	16700.25
100	8	DR9	DRB1*09:01	II	16864.85
100	16	DR9	DRB1*09:01	II	11814.37
100	24	DR9	DRB1*09:01	II	15081.89
100	36	DR9	DRB1*09:01	II	12805.81
100	52	DR9	DRB1*09:01	II	15201.75
100	64	DR9	DRB1*09:01	II	15633.3
100	76	DR9	DRB1*09:01	II	13201
102	0	A1	A*01:01	I	3739
102	8	A1	A*01:01	I	3266.96
102	16	A1	A*01:01	I	2959.01
102	24	A1	A*01:01	I	2688.94
102	36	A1	A*01:01	I	1848.43
102	36	A1	A*01:01	I	3702.57
102	52	A1	A*01:01	I	1319.86
102	64	A1	A*01:01	I	2119.32
102	0	A11	A*11:02	I	6984.41
102	8	A11	A*11:02	I	6264.01
102	16	A11	A*11:02	I	6380.76
102	24	A11	A*11:02	I	4848.25
102	36	A11	A*11:02	I	5439.26
102	36	A11	A*11:02	I	9453.57
102	52	A11	A*11:02	I	5558.49
102	64	A11	A*11:02	I	6966.3
102	0	A29	A*29:01	I	13910.04
102	8	A29	A*29:01	I	13208.5
102	16	A29	A*29:01	I	13667.87
102	24	A29	A*29:01	I	10661.18
102	36	A29	A*29:01	I	11844.62
102	36	A29	A*29:01	I	12128.61
102	52	A29	A*29:01	I	9843.97
102	64	A29	A*29:01	I	12852.29
102	0	A3	A*03:01	I	3185.97
102	8	A3	A*03:01	I	2905.62
102	16	A3	A*03:01	I	2583.61

102	24	A3	A*03:01		2480.78
102	36	A3	A*03:01		1805.91
102	36	A3	A*03:01		3108.29
102	52	A3	A*03:01		1146.28
102	64	A3	A*03:01		1949.23
102	0	A31	A*31:01		3518.53
102	8	A31	A*31:01		2955.9
102	16	A31	A*31:01		2661.92
102	24	A31	A*31:01		2313.66
102	36	A31	A*31:01		1831.97
102	36	A31	A*31:01		4845.14
102	52	A31	A*31:01		1352.51
102	64	A31	A*31:01		1958.41
102	0	A32	A*32:01		3466.91
102	8	A32	A*32:01		2984.2
102	16	A32	A*32:01		2765.51
102	24	A32	A*32:01		2514.16
102	36	A32	A*32:01		1516.8
102	36	A32	A*32:01		2482.58
102	52	A32	A*32:01		1271.42
102	64	A32	A*32:01		2144.86
102	0	A36	A*36:01		4199.07
102	8	A36	A*36:01		3445.2
102	16	A36	A*36:01		3284.32
102	24	A36	A*36:01		3089.38
102	36	A36	A*36:01		2040.6
102	36	A36	A*36:01		3679.35
102	52	A36	A*36:01		1512.39
102	64	A36	A*36:01		2335.67
102	0	A43	A*43:01		4398.28
102	8	A43	A*43:01		3512.18
102	16	A43	A*43:01		3272.18
102	24	A43	A*43:01		2875.93
102	36	A43	A*43:01		2135.07
102	36	A43	A*43:01		2809.17
102	52	A43	A*43:01		1471.71
102	64	A43	A*43:01		2781.15
102	0	A74	A*74:01		4381.72
102	8	A74	A*74:01		3699.83
102	16	A74	A*74:01		3541.6
102	24	A74	A*74:01		3093.71
102	36	A74	A*74:01		2255.76
102	36	A74	A*74:01		4860.35
102	52	A74	A*74:01		1629.63
102	64	A74	A*74:01		2456.28
102	0	A80	A*80:01		3607.21
102	8	A80	A*80:01		3162.73

102	16	A80	A*80:01	I	2827.88
102	24	A80	A*80:01	I	2777.96
102	36	A80	A*80:01	I	1670.21
102	36	A80	A*80:01	I	2804.37
102	52	A80	A*80:01	I	1426.19
102	64	A80	A*80:01	I	2421.94
102	0	DP11	DPA1*01:03DPB1*11:01	II	17445.24
102	8	DP11	DPA1*01:03DPB1*11:01	II	16944.01
102	16	DP11	DPA1*01:03DPB1*11:01	II	17687.1
102	24	DP11	DPA1*01:03DPB1*11:01	II	14533.7
102	36	DP11	DPA1*01:03DPB1*11:01	II	14908.92
102	36	DP11	DPA1*01:03DPB1*11:01	II	16126.87
102	52	DP11	DPA1*01:03DPB1*11:01	II	16797.81
102	64	DP11	DPA1*01:03DPB1*11:01	II	16318
102	0	DP14	DPA1*02:01DPB1*14:01	II	17356.11
102	8	DP14	DPA1*02:01DPB1*14:01	II	15906.18
102	16	DP14	DPA1*02:01DPB1*14:01	II	16354.56
102	24	DP14	DPA1*02:01DPB1*14:01	II	12218.51
102	36	DP14	DPA1*02:01DPB1*14:01	II	13755.4
102	36	DP14	DPA1*02:01DPB1*14:01	II	15343.48
102	52	DP14	DPA1*02:01DPB1*14:01	II	15150.57
102	64	DP14	DPA1*02:01DPB1*14:01	II	15816
102	0	DP17	DPA1*02:01DPB1*17:01	II	17360.25
102	8	DP17	DPA1*02:01DPB1*17:01	II	16508.89
102	16	DP17	DPA1*02:01DPB1*17:01	II	16159.65
102	24	DP17	DPA1*02:01DPB1*17:01	II	12669.97
102	36	DP17	DPA1*02:01DPB1*17:01	II	13746.72
102	36	DP17	DPA1*02:01DPB1*17:01	II	15937.41
102	52	DP17	DPA1*02:01DPB1*17:01	II	15656.87
102	64	DP17	DPA1*02:01DPB1*17:01	II	16643
102	0	DP3	DPA1*01:03DPB1*03:01	II	17731.09
102	8	DP3	DPA1*01:03DPB1*03:01	II	16123.68
102	16	DP3	DPA1*01:03DPB1*03:01	II	16777.5
102	24	DP3	DPA1*01:03DPB1*03:01	II	12532.17
102	36	DP3	DPA1*01:03DPB1*03:01	II	14642.13
102	36	DP3	DPA1*01:03DPB1*03:01	II	15625.25
102	52	DP3	DPA1*01:03DPB1*03:01	II	15619.94
102	64	DP3	DPA1*01:03DPB1*03:01	II	16172
102	0	DP9	DPA1*02:01DPB1*09:01	II	19294.97
102	8	DP9	DPA1*02:01DPB1*09:01	II	18596.81
102	16	DP9	DPA1*02:01DPB1*09:01	II	19111.62
102	24	DP9	DPA1*02:01DPB1*09:01	II	15018.13
102	36	DP9	DPA1*02:01DPB1*09:01	II	17360.06
102	36	DP9	DPA1*02:01DPB1*09:01	II	19290.66
102	52	DP9	DPA1*02:01DPB1*09:01	II	17934.15
102	64	DP9	DPA1*02:01DPB1*09:01	II	19639
102	0	DQ2	DQA1*03:01DQB1*02:01	II	19949.22

102	8	DQ2	DQA1*03:01DQB1*02:01		18269.6
102	16	DQ2	DQA1*03:01DQB1*02:01		19278.83
102	24	DQ2	DQA1*03:01DQB1*02:01		16484.28
102	36	DQ2	DQA1*03:01DQB1*02:01		16678.64
102	36	DQ2	DQA1*03:01DQB1*02:01		18103.94
102	52	DQ2	DQA1*03:01DQB1*02:01		16542.9
102	64	DQ2	DQA1*03:01DQB1*02:01		18170
102	0	DQ7	DQA1*05:05DQB1*03:01		18976.14
102	8	DQ7	DQA1*05:05DQB1*03:01		16775.27
102	16	DQ7	DQA1*05:05DQB1*03:01		15772.75
102	24	DQ7	DQA1*05:05DQB1*03:01		11303.26
102	36	DQ7	DQA1*05:05DQB1*03:01		13125.36
102	36	DQ7	DQA1*05:05DQB1*03:01		14181.24
102	52	DQ7	DQA1*05:05DQB1*03:01		12487.54
102	64	DQ7	DQA1*05:05DQB1*03:01		14989
102	0	DQ9	DQA1*03:02DQB1*03:03		17029.08
102	8	DQ9	DQA1*03:02DQB1*03:03		10994.9
102	16	DQ9	DQA1*03:02DQB1*03:03		10897.15
102	24	DQ9	DQA1*03:02DQB1*03:03		7532.31
102	36	DQ9	DQA1*03:02DQB1*03:03		7825.24
102	36	DQ9	DQA1*03:02DQB1*03:03		8152.24
102	52	DQ9	DQA1*03:02DQB1*03:03		7473.35
102	64	DQ9	DQA1*03:02DQB1*03:03		9306
102	0	DR53	DRB4*01:03		18192.34
102	8	DR53	DRB4*01:03		20255.2
102	16	DR53	DRB4*01:03		18680.98
102	24	DR53	DRB4*01:03		14710.95
102	36	DR53	DRB4*01:03		16643.3
102	36	DR53	DRB4*01:03		17793.45
102	52	DR53	DRB4*01:03		17235.79
102	64	DR53	DRB4*01:03		15527
102	0	DR7	DRB1*07:01		20206.1
102	8	DR7	DRB1*07:01		20631.33
102	16	DR7	DRB1*07:01		21249.67
102	24	DR7	DRB1*07:01		17713.13
102	36	DR7	DRB1*07:01		19266.41
102	36	DR7	DRB1*07:01		19492.1
102	52	DR7	DRB1*07:01		19605.67
102	64	DR7	DRB1*07:01		19669
103	0	A25	A*25:01		10727.17
103	8	A25	A*25:01		7671.83
103	16	A25	A*25:01		8393
103	24	A25	A*25:01		6076.22
103	36	A25	A*25:01		6274.18
103	52	A25	A*25:01		5540.33
103	64	A25	A*25:01		6715.84
103	76	A25	A*25:01		5315.88

103	0	A26	A*26:01		9990.48
103	8	A26	A*26:01		6482.54
103	16	A26	A*26:01		7556.28
103	24	A26	A*26:01		4810.1
103	36	A26	A*26:01		5033.82
103	52	A26	A*26:01		4791.53
103	64	A26	A*26:01		5760.35
103	76	A26	A*26:01		4545.42
103	0	A33	A*33:03		12026.81
103	8	A33	A*33:03		9227.6
103	16	A33	A*33:03		10519.74
103	24	A33	A*33:03		7036.44
103	36	A33	A*33:03		8347.16
103	52	A33	A*33:03		8248.55
103	64	A33	A*33:03		8897.4
103	76	A33	A*33:03		6688.97
103	0	A34	A*34:02		12043.31
103	8	A34	A*34:02		8765.69
103	16	A34	A*34:02		8933.06
103	24	A34	A*34:02		6524.94
103	36	A34	A*34:02		7488.98
103	52	A34	A*34:02		7601.9
103	64	A34	A*34:02		7615.91
103	76	A34	A*34:02		5861.82
103	0	A66	A*66:01		10757.74
103	8	A66	A*66:01		7787.78
103	16	A66	A*66:01		8166.09
103	24	A66	A*66:01		5820.04
103	36	A66	A*66:01		5570.71
103	52	A66	A*66:01		5605.56
103	64	A66	A*66:01		6707.82
103	76	A66	A*66:01		4846.3
103	0	A68	A*68:01		11844.58
103	8	A68	A*68:01		8740.61
103	16	A68	A*68:01		9655.52
103	24	A68	A*68:01		6892
103	36	A68	A*68:01		7766
103	52	A68	A*68:01		7284.59
103	64	A68	A*68:01		8265.04
103	76	A68	A*68:01		6317
103	0	A69	A*69:01		10896.13
103	8	A69	A*69:01		8434.76
103	16	A69	A*69:01		8658.93
103	24	A69	A*69:01		6435.43
103	36	A69	A*69:01		7157.4
103	52	A69	A*69:01		7034.45
103	64	A69	A*69:01		7511.09

103	76	A69	A*69:01	I	6032.27
103	0	B44Bw4	B*44:03	I	7397.57
103	8	B44Bw4	B*44:03	I	6410.01
103	16	B44Bw4	B*44:03	I	7159.65
103	24	B44Bw4	B*44:03	I	6245.83
103	36	B44Bw4	B*44:03	I	5444.41
103	52	B44Bw4	B*44:03	I	6215.62
103	64	B44Bw4	B*44:03	I	6802.67
103	76	B44Bw4	B*44:03	I	5321.34
103	0	B45Bw6	B*45:01	I	7251.08
103	8	B45Bw6	B*45:01	I	6062.56
103	16	B45Bw6	B*45:01	I	7718.94
103	24	B45Bw6	B*45:01	I	6055.45
103	36	B45Bw6	B*45:01	I	5584.7
103	52	B45Bw6	B*45:01	I	5410.96
103	64	B45Bw6	B*45:01	I	6571.34
103	76	B45Bw6	B*45:01	I	5151.64
103	0	B48Bw6	B*48:01	I	7619.48
103	8	B48Bw6	B*48:01	I	5699.81
103	16	B48Bw6	B*48:01	I	6969.74
103	24	B48Bw6	B*48:01	I	4704.65
103	36	B48Bw6	B*48:01	I	5558.16
103	52	B48Bw6	B*48:01	I	5316.3
103	64	B48Bw6	B*48:01	I	6496.61
103	76	B48Bw6	B*48:01	I	4465.3
103	0	DP3	DPA1*01:03DPB1*03:01	II	7140.07
103	8	DP3	DPA1*01:03DPB1*03:01	II	6966.31
103	16	DP3	DPA1*01:03DPB1*03:01	II	8340.06
103	24	DP3	DPA1*01:03DPB1*03:01	II	8231.56
103	36	DP3	DPA1*01:03DPB1*03:01	II	8644.09
103	52	DP3	DPA1*01:03DPB1*03:01	II	7379.12
103	64	DP3	DPA1*01:03DPB1*03:01	II	8261
103	76	DP3	DPA1*01:03DPB1*03:01	II	6502.43
103	0	DQ5	DQA1*01:01DQB1*05:01	II	11215.02
103	8	DQ5	DQA1*01:01DQB1*05:01	II	11970.68
103	16	DQ5	DQA1*01:01DQB1*05:01	II	12712.7
103	24	DQ5	DQA1*01:01DQB1*05:01	II	12749.93
103	36	DQ5	DQA1*01:01DQB1*05:01	II	13192.07
103	52	DQ5	DQA1*01:01DQB1*05:01	II	14065.08
103	64	DQ5	DQA1*01:01DQB1*05:01	II	14909
103	76	DQ5	DQA1*01:01DQB1*05:01	II	12609.62
103	0	DQ6	DQA1*01:02DQB1*06:09	II	11390.01
103	8	DQ6	DQA1*01:02DQB1*06:09	II	12095.45
103	16	DQ6	DQA1*01:02DQB1*06:09	II	13224.74
103	24	DQ6	DQA1*01:02DQB1*06:09	II	12871.27
103	36	DQ6	DQA1*01:02DQB1*06:09	II	13972.5
103	52	DQ6	DQA1*01:02DQB1*06:09	II	14225.68

103	64	DQ6	DQA1*01:02DQB1*06:09	II	15742
103	76	DQ6	DQA1*01:02DQB1*06:09	II	13281.09
103	0	DR1	DRB1*01:01	II	13431.22
103	8	DR1	DRB1*01:01	II	13503.5
103	16	DR1	DRB1*01:01	II	14559.96
103	24	DR1	DRB1*01:01	II	15356.12
103	36	DR1	DRB1*01:01	II	14215.19
103	52	DR1	DRB1*01:01	II	14144.54
103	64	DR1	DRB1*01:01	II	15890
103	76	DR1	DRB1*01:01	II	13695.86
103	0	DR103	DRB1*01:03	II	9712.86
103	8	DR103	DRB1*01:03	II	9405.21
103	16	DR103	DRB1*01:03	II	11145.63
103	24	DR103	DRB1*01:03	II	11312.43
103	36	DR103	DRB1*01:03	II	11712.25
103	52	DR103	DRB1*01:03	II	11095.54
103	64	DR103	DRB1*01:03	II	12228
103	76	DR103	DRB1*01:03	II	10806.02
103	0	DR15	DRB1*15:03	II	7698.8
103	8	DR15	DRB1*15:03	II	7160.88
103	16	DR15	DRB1*15:03	II	8302.14
103	24	DR15	DRB1*15:03	II	8661.22
103	36	DR15	DRB1*15:03	II	8809.03
103	52	DR15	DRB1*15:03	II	8181.82
103	64	DR15	DRB1*15:03	II	9120
103	76	DR15	DRB1*15:03	II	7975.97
103	0	DR4	DRB1*04:04	II	9737.47
103	8	DR4	DRB1*04:04	II	9914.03
103	16	DR4	DRB1*04:04	II	11093.93
103	24	DR4	DRB1*04:04	II	10752.43
103	36	DR4	DRB1*04:04	II	10655.8
103	52	DR4	DRB1*04:04	II	9020.94
103	64	DR4	DRB1*04:04	II	11191
103	76	DR4	DRB1*04:04	II	9048.8
103	0	DR51	DRB5*02:02	II	12902.03
103	8	DR51	DRB5*02:02	II	11786.69
103	16	DR51	DRB5*02:02	II	13887.14
103	24	DR51	DRB5*02:02	II	14465.58
103	36	DR51	DRB5*02:02	II	13877.56
103	52	DR51	DRB5*02:02	II	13912.67
103	64	DR51	DRB5*02:02	II	14682
103	76	DR51	DRB5*02:02	II	12980.39
103	0	DR53	DRB4*01:03	II	15979.48
103	8	DR53	DRB4*01:03	II	15840.77
103	16	DR53	DRB4*01:03	II	17939.64
103	24	DR53	DRB4*01:03	II	17852.03
103	36	DR53	DRB4*01:03	II	17510.66

103	52	DR53	DRB4*01:03	II	17626.41
103	64	DR53	DRB4*01:03	II	18243
103	76	DR53	DRB4*01:03	II	16243.19
103	0	DR9	DRB1*09:01	II	7216.11
103	8	DR9	DRB1*09:01	II	6575.4
103	16	DR9	DRB1*09:01	II	6955.44
103	24	DR9	DRB1*09:01	II	6603.49
103	36	DR9	DRB1*09:01	II	7554.91
103	52	DR9	DRB1*09:01	II	7645.17
103	64	DR9	DRB1*09:01	II	8450
103	76	DR9	DRB1*09:01	II	7260.76
104	0	DR17	DRB1*03:01	II	2304.52
104	8	DR17	DRB1*03:01	II	2789.73
104	16	DR17	DRB1*03:01	II	2014.72
104	24	DR17	DRB1*03:01	II	2432.99
104	36	DR17	DRB1*03:01	II	2070
104	52	DR17	DRB1*03:01	II	2434
104	64	DR17	DRB1*03:01	II	2113
104	76	DR17	DRB1*03:01	II	1641
105	0	B59Bw4	B*59:01	I	15026.84
105	8	B59Bw4	B*59:01	I	15207.59
105	16	B59Bw4	B*59:01	I	18146.71
105	24	B59Bw4	B*59:01	I	18782.04
105	36	B59Bw4	B*59:01	I	13969
105	52	B59Bw4	B*59:01	I	9553
105	64	B59Bw4	B*59:01	I	15484
105	76	B59Bw4	B*59:01	I	16942
105	0	B60Bw6	B*40:01	I	16047.49
105	8	B60Bw6	B*40:01	I	16939.33
105	16	B60Bw6	B*40:01	I	18524.77
105	24	B60Bw6	B*40:01	I	19251.4
105	36	B60Bw6	B*40:01	I	15685
105	52	B60Bw6	B*40:01	I	11227
105	64	B60Bw6	B*40:01	I	15699
105	76	B60Bw6	B*40:01	I	16986
105	0	B61Bw6	B*40:06	I	15250.15
105	8	B61Bw6	B*40:06	I	16814.46
105	16	B61Bw6	B*40:06	I	18373.36
105	24	B61Bw6	B*40:06	I	18763.55
105	36	B61Bw6	B*40:06	I	16515
105	52	B61Bw6	B*40:06	I	13393
105	64	B61Bw6	B*40:06	I	16119
105	76	B61Bw6	B*40:06	I	17826
105	0	B76Bw6	B*15:12	I	16407.07
105	8	B76Bw6	B*15:12	I	17179.32
105	16	B76Bw6	B*15:12	I	20074.15
105	24	B76Bw6	B*15:12	I	19699.74

105	36	B76Bw6	B*15:12		17873
105	52	B76Bw6	B*15:12		13188
105	64	B76Bw6	B*15:12		17544
105	76	B76Bw6	B*15:12		17874
105	0	B82Bw6	B*82:01		14300.82
105	8	B82Bw6	B*82:01		15952.62
105	16	B82Bw6	B*82:01		16973.62
105	24	B82Bw6	B*82:01		16696.89
105	36	B82Bw6	B*82:01		17535
105	52	B82Bw6	B*82:01		15388
105	64	B82Bw6	B*82:01		14860
105	76	B82Bw6	B*82:01		15974
105	0	Cw15	C*15:02		16582.14
105	8	Cw15	C*15:02		16915.76
105	16	Cw15	C*15:02		18200.28
105	24	Cw15	C*15:02		19052.42
105	36	Cw15	C*15:02		15931
105	52	Cw15	C*15:02		13943
105	64	Cw15	C*15:02		16188
105	76	Cw15	C*15:02		17346
105	0	Cw18	C*18:02		16121.26
105	8	Cw18	C*18:02		16161.8
105	16	Cw18	C*18:02		18000.02
105	24	Cw18	C*18:02		17256.73
105	36	Cw18	C*18:02		16953
105	52	Cw18	C*18:02		14761
105	64	Cw18	C*18:02		15438
105	76	Cw18	C*18:02		16028
105	0	Cw5	C*05:01		17023.51
105	8	Cw5	C*05:01		18597.69
105	16	Cw5	C*05:01		19903.8
105	24	Cw5	C*05:01		20272.87
105	36	Cw5	C*05:01		18226
105	52	Cw5	C*05:01		15497
105	64	Cw5	C*05:01		18041
105	76	Cw5	C*05:01		19153
105	0	Cw6	C*06:02		14071.86
105	8	Cw6	C*06:02		14475.6
105	16	Cw6	C*06:02		15185.79
105	24	Cw6	C*06:02		15180.57
105	36	Cw6	C*06:02		14461
105	52	Cw6	C*06:02		13756
105	64	Cw6	C*06:02		12965
105	76	Cw6	C*06:02		13328
105	0	Cw8	C*08:01		15768.12
105	8	Cw8	C*08:01		17002.5
105	16	Cw8	C*08:01		17406.04

105	24	Cw8	C*08:01	I	17212.48
105	36	Cw8	C*08:01	I	17721
105	52	Cw8	C*08:01	I	15532
105	64	Cw8	C*08:01	I	13638
105	76	Cw8	C*08:01	I	14410
105	0	DQ5	DQA1*01:02DQB1*05:02	II	21953.41
105	8	DQ5	DQA1*01:02DQB1*05:02	II	21921.3
105	16	DQ5	DQA1*01:02DQB1*05:02	II	22922.39
105	24	DQ5	DQA1*01:02DQB1*05:02	II	21834.62
105	36	DQ5	DQA1*01:02DQB1*05:02	II	20943
105	52	DQ5	DQA1*01:02DQB1*05:02	II	19110
105	64	DQ5	DQA1*01:02DQB1*05:02	II	15865
105	76	DQ5	DQA1*01:02DQB1*05:02	II	20388
105	0	DQ6	DQA1*01:02DQB1*06:04	II	21932.46
105	8	DQ6	DQA1*01:02DQB1*06:04	II	21555.99
105	16	DQ6	DQA1*01:02DQB1*06:04	II	23276.58
105	24	DQ6	DQA1*01:02DQB1*06:04	II	22194.37
105	36	DQ6	DQA1*01:02DQB1*06:04	II	21756
105	52	DQ6	DQA1*01:02DQB1*06:04	II	15737
105	64	DQ6	DQA1*01:02DQB1*06:04	II	14134
105	76	DQ6	DQA1*01:02DQB1*06:04	II	20973
105	0	DR12	DRB1*12:02	II	20709.78
105	8	DR12	DRB1*12:02	II	20379.53
105	16	DR12	DRB1*12:02	II	23508.34
105	24	DR12	DRB1*12:02	II	21994.43
105	36	DR12	DRB1*12:02	II	20741
105	52	DR12	DRB1*12:02	II	16308
105	64	DR12	DRB1*12:02	II	15294
105	76	DR12	DRB1*12:02	II	19590
105	0	DR14	DRB1*14:01	II	21783.15
105	8	DR14	DRB1*14:01	II	22010.16
105	16	DR14	DRB1*14:01	II	23328.61
105	24	DR14	DRB1*14:01	II	22222.49
105	36	DR14	DRB1*14:01	II	21351
105	52	DR14	DRB1*14:01	II	19138
105	64	DR14	DRB1*14:01	II	14493
105	76	DR14	DRB1*14:01	II	20139
105	0	DR15	DRB1*15:01	II	20806.35
105	8	DR15	DRB1*15:01	II	20191.66
105	16	DR15	DRB1*15:01	II	21466.6
105	24	DR15	DRB1*15:01	II	20584.3
105	36	DR15	DRB1*15:01	II	19355
105	52	DR15	DRB1*15:01	II	19412
105	64	DR15	DRB1*15:01	II	11769
105	76	DR15	DRB1*15:01	II	18102
105	0	DR17	DRB1*03:01	II	21513.87
105	8	DR17	DRB1*03:01	II	21621.86

105	16	DR17	DRB1*03:01		23552.34
105	24	DR17	DRB1*03:01		22155.9
105	36	DR17	DRB1*03:01		21938
105	52	DR17	DRB1*03:01		17295
105	64	DR17	DRB1*03:01		16131
105	76	DR17	DRB1*03:01		20714
105	0	DR18	DRB1*03:02		20862.64
105	8	DR18	DRB1*03:02		20714.95
105	16	DR18	DRB1*03:02		22204.96
105	24	DR18	DRB1*03:02		21154.15
105	36	DR18	DRB1*03:02		20326
105	52	DR18	DRB1*03:02		17754
105	64	DR18	DRB1*03:02		16369
105	76	DR18	DRB1*03:02		19430
105	0	DR52	DRB3*01:01		20592.99
105	8	DR52	DRB3*01:01		20388.36
105	16	DR52	DRB3*01:01		21697.61
105	24	DR52	DRB3*01:01		20558.39
105	36	DR52	DRB3*01:01		19469
105	52	DR52	DRB3*01:01		17476
105	64	DR52	DRB3*01:01		13399
105	76	DR52	DRB3*01:01		18931
105	0	DR7	DRB1*07:01		21131.02
105	8	DR7	DRB1*07:01		20771.6
105	16	DR7	DRB1*07:01		24168.44
105	24	DR7	DRB1*07:01		22453.55
105	36	DR7	DRB1*07:01		20702
105	52	DR7	DRB1*07:01		14308
105	64	DR7	DRB1*07:01		15412
105	76	DR7	DRB1*07:01		20510
105	0	DR9	DRB1*09:02		22393.06
105	8	DR9	DRB1*09:02		22621.57
105	16	DR9	DRB1*09:02		22822.84
105	24	DR9	DRB1*09:02		22290.82
105	36	DR9	DRB1*09:02		21604
105	52	DR9	DRB1*09:02		20827
105	64	DR9	DRB1*09:02		13729
105	76	DR9	DRB1*09:02		21555
107	0	DP1	DPA1*02:01DPB1*01:01		3941.92
107	8	DP1	DPA1*02:01DPB1*01:01		3969.68
107	16	DP1	DPA1*02:01DPB1*01:01		3277.71
107	24	DP1	DPA1*02:01DPB1*01:01		3206.66
107	36	DP1	DPA1*02:01DPB1*01:01		3564.14
107	52	DP1	DPA1*02:01DPB1*01:01		3572.38
107	64	DP1	DPA1*02:01DPB1*01:01		3153
107	0	DP18	DPA1*02:01DPB1*18:01		2731.55
107	8	DP18	DPA1*02:01DPB1*18:01		2607.11

107	16	DP18	DPA1*02:01DPB1*18:01		1938.12
107	24	DP18	DPA1*02:01DPB1*18:01		1915.89
107	36	DP18	DPA1*02:01DPB1*18:01		2200.2
107	52	DP18	DPA1*02:01DPB1*18:01		2275.68
107	64	DP18	DPA1*02:01DPB1*18:01		1761
107	0	DP4	DPA1*01:03DPB1*04:01		2569.76
107	8	DP4	DPA1*01:03DPB1*04:01		2631.66
107	16	DP4	DPA1*01:03DPB1*04:01		2150.5
107	24	DP4	DPA1*01:03DPB1*04:01		1967.03
107	36	DP4	DPA1*01:03DPB1*04:01		2231.79
107	52	DP4	DPA1*01:03DPB1*04:01		2098.5
107	64	DP4	DPA1*01:03DPB1*04:01		2022
107	0	DP5	DPA1*02:01DPB1*05:01		2715.37
107	8	DP5	DPA1*02:01DPB1*05:01		2536.71
107	16	DP5	DPA1*02:01DPB1*05:01		1962.97
107	24	DP5	DPA1*02:01DPB1*05:01		2056.37
107	36	DP5	DPA1*02:01DPB1*05:01		2249.13
107	52	DP5	DPA1*02:01DPB1*05:01		2306.62
107	64	DP5	DPA1*02:01DPB1*05:01		1730
107	0	DP9	DPA1*02:01DPB1*09:01		2903.55
107	8	DP9	DPA1*02:01DPB1*09:01		2631.24
107	16	DP9	DPA1*02:01DPB1*09:01		2176.85
107	24	DP9	DPA1*02:01DPB1*09:01		2192.65
107	36	DP9	DPA1*02:01DPB1*09:01		2275.57
107	52	DP9	DPA1*02:01DPB1*09:01		2491.74
107	64	DP9	DPA1*02:01DPB1*09:01		2084
107	0	DR11	DRB1*11:04		11626.73
107	8	DR11	DRB1*11:04		11515.82
107	16	DR11	DRB1*11:04		10551.22
107	24	DR11	DRB1*11:04		11224.03
107	36	DR11	DRB1*11:04		11242.26
107	52	DR11	DRB1*11:04		11869.32
107	64	DR11	DRB1*11:04		9476
107	0	DR13	DRB1*13:03		14665.81
107	8	DR13	DRB1*13:03		14761.59
107	16	DR13	DRB1*13:03		13971.38
107	24	DR13	DRB1*13:03		14214.33
107	36	DR13	DRB1*13:03		13744.63
107	52	DR13	DRB1*13:03		14423.26
107	64	DR13	DRB1*13:03		12044
107	0	DR14	DRB1*14:01		12380.99
107	8	DR14	DRB1*14:01		13826.65
107	16	DR14	DRB1*14:01		11856.73
107	24	DR14	DRB1*14:01		12782.01
107	36	DR14	DRB1*14:01		12407.3
107	52	DR14	DRB1*14:01		13411.19
107	64	DR14	DRB1*14:01		11406

107	0	DR17	DRB1*03:01		14779.92
107	8	DR17	DRB1*03:01		14554.8
107	16	DR17	DRB1*03:01		14664.82
107	24	DR17	DRB1*03:01		14972.72
107	36	DR17	DRB1*03:01		13833.44
107	52	DR17	DRB1*03:01		15511.57
107	64	DR17	DRB1*03:01		12999
107	0	DR18	DRB1*03:02		12740.02
107	8	DR18	DRB1*03:02		11569.2
107	16	DR18	DRB1*03:02		10462.89
107	24	DR18	DRB1*03:02		12276.38
107	36	DR18	DRB1*03:02		11026.26
107	52	DR18	DRB1*03:02		12022.33
107	64	DR18	DRB1*03:02		9779
108	0	A2	A*02:03		19903.03
108	8	A2	A*02:03		16590.32
108	36	A2	A*02:03		19415.23
108	52	A2	A*02:03		19270.57
108	64	A2	A*02:03		19300.28
108	76	A2	A*02:03		18406.61
108	0	A31	A*31:01		13440.63
108	8	A31	A*31:01		10371.65
108	36	A31	A*31:01		9710.36
108	52	A31	A*31:01		11280.53
108	64	A31	A*31:01		10352.27
108	76	A31	A*31:01		10411.09
108	0	A69	A*69:01		17575.62
108	8	A69	A*69:01		13443.56
108	36	A69	A*69:01		16559.35
108	52	A69	A*69:01		17711.95
108	64	A69	A*69:01		16492.61
108	76	A69	A*69:01		14205.83
108	0	B39Bw6	B*39:01		14016.78
108	8	B39Bw6	B*39:01		9825.43
108	36	B39Bw6	B*39:01		9486.74
108	52	B39Bw6	B*39:01		9539.67
108	64	B39Bw6	B*39:01		9173.06
108	76	B39Bw6	B*39:01		8907.5
108	0	B46Bw6	B*46:01		13867.91
108	8	B46Bw6	B*46:01		10885.34
108	36	B46Bw6	B*46:01		11329.57
108	52	B46Bw6	B*46:01		11326.75
108	64	B46Bw6	B*46:01		10517.01
108	76	B46Bw6	B*46:01		10206.13
108	0	B51Bw4	B*51:01		15121.87
108	8	B51Bw4	B*51:01		12992.36
108	36	B51Bw4	B*51:01		13282.83

108	52	B51Bw4	B*51:01	I	13460.23
108	64	B51Bw4	B*51:01	I	13424.4
108	76	B51Bw4	B*51:01	I	12497.18
108	0	B52Bw4	B*52:01	I	16599.86
108	8	B52Bw4	B*52:01	I	14654.43
108	36	B52Bw4	B*52:01	I	15046.76
108	52	B52Bw4	B*52:01	I	15336.7
108	64	B52Bw4	B*52:01	I	14924
108	76	B52Bw4	B*52:01	I	14584.92
108	0	B67Bw6	B*67:01	I	10290.59
108	8	B67Bw6	B*67:01	I	7449.97
108	36	B67Bw6	B*67:01	I	6040.64
108	52	B67Bw6	B*67:01	I	6392.83
108	64	B67Bw6	B*67:01	I	6416.45
108	76	B67Bw6	B*67:01	I	6067.07
108	0	Cw10	C*03:04	I	19564.17
108	8	Cw10	C*03:04	I	16474.83
108	36	Cw10	C*03:04	I	18035.11
108	52	Cw10	C*03:04	I	17942.15
108	64	Cw10	C*03:04	I	17143.55
108	76	Cw10	C*03:04	I	17988.78
108	0	Cw9	C*03:03	I	19414.18
108	8	Cw9	C*03:03	I	17904.04
108	36	Cw9	C*03:03	I	18384.78
108	52	Cw9	C*03:03	I	19420.65
108	64	Cw9	C*03:03	I	18140.38
108	76	Cw9	C*03:03	I	18281.41
108	0	DP17	DPA1*02:01DPB1*17:01	II	20390.96
108	8	DP17	DPA1*02:01DPB1*17:01	II	20172.58
108	36	DP17	DPA1*02:01DPB1*17:01	II	19134.67
108	52	DP17	DPA1*02:01DPB1*17:01	II	18419.75
108	64	DP17	DPA1*02:01DPB1*17:01	II	20375.49
108	76	DP17	DPA1*02:01DPB1*17:01	II	19005.94
108	0	DP18	DPA1*02:01DPB1*18:01	II	21996.57
108	8	DP18	DPA1*02:01DPB1*18:01	II	21995.07
108	36	DP18	DPA1*02:01DPB1*18:01	II	21243.81
108	52	DP18	DPA1*02:01DPB1*18:01	II	19182.31
108	64	DP18	DPA1*02:01DPB1*18:01	II	21382.93
108	76	DP18	DPA1*02:01DPB1*18:01	II	21827.14
108	0	DP2	DPA1*01:03DPB1*02:01	II	20168.15
108	8	DP2	DPA1*01:03DPB1*02:01	II	19658.85
108	36	DP2	DPA1*01:03DPB1*02:01	II	18959.56
108	52	DP2	DPA1*01:03DPB1*02:01	II	18042.4
108	64	DP2	DPA1*01:03DPB1*02:01	II	20451.3
108	76	DP2	DPA1*01:03DPB1*02:01	II	19229.65
108	0	DP4	DPA1*01:03DPB1*04:01	II	21302.77
108	8	DP4	DPA1*01:03DPB1*04:01	II	20913.36

108	36	DP4	DPA1*01:03DPB1*04:01	II	20649.33
108	52	DP4	DPA1*01:03DPB1*04:01	II	19815.27
108	64	DP4	DPA1*01:03DPB1*04:01	II	21877.8
108	76	DP4	DPA1*01:03DPB1*04:01	II	20789.74
108	0	DP9	DPA1*02:01DPB1*09:01	II	20998.07
108	8	DP9	DPA1*02:01DPB1*09:01	II	20031.94
108	36	DP9	DPA1*02:01DPB1*09:01	II	20352.89
108	52	DP9	DPA1*02:01DPB1*09:01	II	18310.17
108	64	DP9	DPA1*02:01DPB1*09:01	II	20477.92
108	76	DP9	DPA1*02:01DPB1*09:01	II	19562.94
108	0	DR11	DRB1*11:04	II	19925.93
108	8	DR11	DRB1*11:04	II	20765.87
108	36	DR11	DRB1*11:04	II	19760.62
108	52	DR11	DRB1*11:04	II	19791.27
108	64	DR11	DRB1*11:04	II	20975.52
108	76	DR11	DRB1*11:04	II	20082.9
108	0	DR13	DRB1*13:03	II	20712.36
108	8	DR13	DRB1*13:03	II	20713.85
108	36	DR13	DRB1*13:03	II	20485.55
108	52	DR13	DRB1*13:03	II	20305.54
108	64	DR13	DRB1*13:03	II	21795.9
108	76	DR13	DRB1*13:03	II	20505.48
108	0	DR4	DRB1*04:04	II	22312.56
108	8	DR4	DRB1*04:04	II	22017.12
108	36	DR4	DRB1*04:04	II	22215.35
108	52	DR4	DRB1*04:04	II	21936.5
108	64	DR4	DRB1*04:04	II	22152.84
108	76	DR4	DRB1*04:04	II	22110.72
108	0	DR53	DRB4*01:01	II	19615.78
108	8	DR53	DRB4*01:01	II	19700.66
108	36	DR53	DRB4*01:01	II	18213.93
108	52	DR53	DRB4*01:01	II	17337.64
108	64	DR53	DRB4*01:01	II	18913.48
108	76	DR53	DRB4*01:01	II	18490.65
108	0	DR9	DRB1*09:02	II	22125.14
108	8	DR9	DRB1*09:02	II	21576.8
108	36	DR9	DRB1*09:02	II	21871.6
108	52	DR9	DRB1*09:02	II	21176.99
108	64	DR9	DRB1*09:02	II	21953.98
108	76	DR9	DRB1*09:02	II	21301.19
109	0	A11	A*11:01	I	14817.89
109	8	A11	A*11:01	I	16808.06
109	16	A11	A*11:01	I	17352.11
109	24	A11	A*11:01	I	16028.24
109	36	A11	A*11:01	I	12855.64
109	52	A11	A*11:01	I	13535.63
109	64	A11	A*11:01	I	14145.34

109	76	A11	A*11:01		15280.79
109	0	A25	A*25:01		13692.97
109	8	A25	A*25:01		16223.44
109	16	A25	A*25:01		17453.94
109	24	A25	A*25:01		15144.9
109	36	A25	A*25:01		12246.22
109	52	A25	A*25:01		3015.83
109	64	A25	A*25:01		3480.51
109	76	A25	A*25:01		12272.34
109	0	A34	A*34:01		12563.24
109	8	A34	A*34:01		15598.17
109	16	A34	A*34:01		17144.98
109	24	A34	A*34:01		14836
109	36	A34	A*34:01		12399.43
109	52	A34	A*34:01		14736.57
109	64	A34	A*34:01		13515.38
109	76	A34	A*34:01		14694.45
109	0	A36	A*36:01		14370.5
109	8	A36	A*36:01		16248.06
109	16	A36	A*36:01		17060.23
109	24	A36	A*36:01		15433.44
109	36	A36	A*36:01		12682.29
109	52	A36	A*36:01		13164.31
109	64	A36	A*36:01		13394.25
109	76	A36	A*36:01		15795.24
109	0	A66	A*66:01		12166.68
109	8	A66	A*66:01		14978.53
109	16	A66	A*66:01		16672.88
109	24	A66	A*66:01		13876.75
109	36	A66	A*66:01		10488.03
109	52	A66	A*66:01		12068.36
109	64	A66	A*66:01		10641.59
109	76	A66	A*66:01		14227.73
109	0	A80	A*80:01		13871.41
109	8	A80	A*80:01		15742.64
109	16	A80	A*80:01		17102.72
109	24	A80	A*80:01		15786.49
109	36	A80	A*80:01		12361.72
109	52	A80	A*80:01		7399.14
109	64	A80	A*80:01		9340.49
109	76	A80	A*80:01		13634.97
109	0	B27Bw4	B*27:05		14018.02
109	8	B27Bw4	B*27:05		15411.24
109	16	B27Bw4	B*27:05		17277.09
109	24	B27Bw4	B*27:05		15118.56
109	36	B27Bw4	B*27:05		13280.96
109	52	B27Bw4	B*27:05		6652.69

109	64	B27Bw4	B*27:05	I	7317.38
109	76	B27Bw4	B*27:05	I	16985.9
109	0	B27Bw6	B*27:08	I	15526.54
109	8	B27Bw6	B*27:08	I	15965.44
109	16	B27Bw6	B*27:08	I	16625.26
109	24	B27Bw6	B*27:08	I	15668.1
109	36	B27Bw6	B*27:08	I	13679.9
109	52	B27Bw6	B*27:08	I	15278.47
109	64	B27Bw6	B*27:08	I	14848.6
109	76	B27Bw6	B*27:08	I	15314.47
109	0	B73Bw6	B*73:01	I	15076.14
109	8	B73Bw6	B*73:01	I	16522.09
109	16	B73Bw6	B*73:01	I	18449.05
109	24	B73Bw6	B*73:01	I	17562.49
109	36	B73Bw6	B*73:01	I	14823.91
109	52	B73Bw6	B*73:01	I	17338.87
109	64	B73Bw6	B*73:01	I	16671.66
109	76	B73Bw6	B*73:01	I	16932.07
109	0	Cw18	C*18:02	I	14706.91
109	8	Cw18	C*18:02	I	16100.96
109	16	Cw18	C*18:02	I	17359.11
109	24	Cw18	C*18:02	I	16411.07
109	36	Cw18	C*18:02	I	14569.37
109	52	Cw18	C*18:02	I	15772.66
109	64	Cw18	C*18:02	I	15503.65
109	76	Cw18	C*18:02	I	15822.34
109	0	DR4	DRB1*04:04	II	2494.57
109	8	DR4	DRB1*04:04	II	1648.42
109	16	DR4	DRB1*04:04	II	2638.02
109	24	DR4	DRB1*04:04	II	1800.85
109	36	DR4	DRB1*04:04	II	1722
109	52	DR4	DRB1*04:04	II	7801.52
109	64	DR4	DRB1*04:04	II	2373.65
109	76	DR4	DRB1*04:04	II	2390
111	0	A2	A*02:01	I	3018.22
111	8	A2	A*02:01	I	3784.75
111	16	A2	A*02:01	I	2549.52
111	24	A2	A*02:01	I	2286.04
111	36	A2	A*02:01	I	3102.96
111	52	A2	A*02:01	I	2635.86
111	64	A2	A*02:01	I	2493
111	76	A2	A*02:01	I	2506
111	0	A23	A*23:01	I	3417.22
111	8	A23	A*23:01	I	4165.4
111	16	A23	A*23:01	I	2794.08
111	24	A23	A*23:01	I	2411.52
111	36	A23	A*23:01	I	3174.22

111	52	A23	A*23:01		2657.88
111	64	A23	A*23:01		1919
111	76	A23	A*23:01		1474
111	0	A24	A*24:03		3984.27
111	8	A24	A*24:03		5169.04
111	16	A24	A*24:03		3929.96
111	24	A24	A*24:03		3218.93
111	36	A24	A*24:03		4411.03
111	52	A24	A*24:03		3913.6
111	64	A24	A*24:03		2582
111	76	A24	A*24:03		2070
111	0	A3	A*03:01		5051.98
111	8	A3	A*03:01		5854.3
111	16	A3	A*03:01		4819.28
111	24	A3	A*03:01		4511.57
111	36	A3	A*03:01		4778.41
111	52	A3	A*03:01		4637.71
111	64	A3	A*03:01		2448
111	76	A3	A*03:01		2268
111	0	A69	A*69:01		2671.6
111	8	A69	A*69:01		3329.2
111	16	A69	A*69:01		2426.88
111	24	A69	A*69:01		1881.77
111	36	A69	A*69:01		2648.25
111	52	A69	A*69:01		2461.99
111	64	A69	A*69:01		2212
111	76	A69	A*69:01		1852
111	0	B54Bw6	B*54:01		2835.44
111	8	B54Bw6	B*54:01		3433.17
111	16	B54Bw6	B*54:01		2734.69
111	24	B54Bw6	B*54:01		2612.79
111	36	B54Bw6	B*54:01		3149.71
111	52	B54Bw6	B*54:01		2619.43
111	64	B54Bw6	B*54:01		2029
111	76	B54Bw6	B*54:01		2913
111	0	B64Bw6	B*14:01		6955.16
111	8	B64Bw6	B*14:01		7961.04
111	16	B64Bw6	B*14:01		6527.66
111	24	B64Bw6	B*14:01		5940.42
111	36	B64Bw6	B*14:01		6727.55
111	52	B64Bw6	B*14:01		6378.02
111	64	B64Bw6	B*14:01		4314
111	76	B64Bw6	B*14:01		5274
111	0	B65Bw6	B*14:02		11143.82
111	8	B65Bw6	B*14:02		12838.18
111	16	B65Bw6	B*14:02		10874.55
111	24	B65Bw6	B*14:02		10399.17

111	36	B65Bw6	B*14:02	I	11447.95
111	52	B65Bw6	B*14:02	I	10800.68
111	64	B65Bw6	B*14:02	I	7857
111	76	B65Bw6	B*14:02	I	9055
111	0	B8Bw6	B*08:01	I	5503.7
111	8	B8Bw6	B*08:01	I	6502.88
111	16	B8Bw6	B*08:01	I	5333.93
111	24	B8Bw6	B*08:01	I	5382.01
111	36	B8Bw6	B*08:01	I	6343.14
111	52	B8Bw6	B*08:01	I	5250.66
111	64	B8Bw6	B*08:01	I	5269
111	76	B8Bw6	B*08:01	I	7050
111	0	Cw5	C*05:01	I	15968.16
111	8	Cw5	C*05:01	I	15889.32
111	16	Cw5	C*05:01	I	16196.96
111	24	Cw5	C*05:01	I	15166.13
111	36	Cw5	C*05:01	I	16147.93
111	52	Cw5	C*05:01	I	15641.46
111	64	Cw5	C*05:01	I	15281
111	76	Cw5	C*05:01	I	16160
111	0	DQ4	DQA1*03:03DQB1*04:01	II	5047.41
111	8	DQ4	DQA1*03:03DQB1*04:01	II	8563.4
111	16	DQ4	DQA1*03:03DQB1*04:01	II	4648.61
111	24	DQ4	DQA1*03:03DQB1*04:01	II	5291.99
111	36	DQ4	DQA1*03:03DQB1*04:01	II	3630.94
111	52	DQ4	DQA1*03:03DQB1*04:01	II	5019.9
111	64	DQ4	DQA1*03:03DQB1*04:01	II	1488
111	76	DQ4	DQA1*03:03DQB1*04:01	II	1342
111	0	DQ5	DQA1*01:01DQB1*05:01	II	2192.58
111	8	DQ5	DQA1*01:01DQB1*05:01	II	3935.18
111	16	DQ5	DQA1*01:01DQB1*05:01	II	2893.47
111	24	DQ5	DQA1*01:01DQB1*05:01	II	3057.76
111	36	DQ5	DQA1*01:01DQB1*05:01	II	2560.84
111	52	DQ5	DQA1*01:01DQB1*05:01	II	3198.01
111	64	DQ5	DQA1*01:01DQB1*05:01	II	1974
111	76	DQ5	DQA1*01:01DQB1*05:01	II	2758
111	0	DQ6	DQA1*01:02DQB1*06:09	II	13566.23
111	8	DQ6	DQA1*01:02DQB1*06:09	II	14680.43
111	16	DQ6	DQA1*01:02DQB1*06:09	II	14386.13
111	24	DQ6	DQA1*01:02DQB1*06:09	II	15149.06
111	36	DQ6	DQA1*01:02DQB1*06:09	II	13102.21
111	52	DQ6	DQA1*01:02DQB1*06:09	II	15306.69
111	64	DQ6	DQA1*01:02DQB1*06:09	II	9702
111	76	DQ6	DQA1*01:02DQB1*06:09	II	11510
111	0	DQ8	DQA1*03:02DQB1*03:02	II	11500.78
111	8	DQ8	DQA1*03:02DQB1*03:02	II	14902.65
111	16	DQ8	DQA1*03:02DQB1*03:02	II	11550.73

111	24	DQ8	DQA1*03:02DQB1*03:02		12983.28
111	36	DQ8	DQA1*03:02DQB1*03:02		11000.77
111	52	DQ8	DQA1*03:02DQB1*03:02		13679.02
111	64	DQ8	DQA1*03:02DQB1*03:02		6471
111	76	DQ8	DQA1*03:02DQB1*03:02		7031
111	0	DQ9	DQA1*03:02DQB1*03:03		12425.39
111	8	DQ9	DQA1*03:02DQB1*03:03		15205.81
111	16	DQ9	DQA1*03:02DQB1*03:03		11322.06
111	24	DQ9	DQA1*03:02DQB1*03:03		13068.34
111	36	DQ9	DQA1*03:02DQB1*03:03		10888.33
111	52	DQ9	DQA1*03:02DQB1*03:03		13307.89
111	64	DQ9	DQA1*03:02DQB1*03:03		6349
111	76	DQ9	DQA1*03:02DQB1*03:03		6893
111	0	DR103	DRB1*01:03		5855.57
111	8	DR103	DRB1*01:03		8579.63
111	16	DR103	DRB1*01:03		6510.76
111	24	DR103	DRB1*01:03		7547.3
111	36	DR103	DRB1*01:03		6056.77
111	52	DR103	DRB1*01:03		8129.5
111	64	DR103	DRB1*01:03		4398
111	76	DR103	DRB1*01:03		4453
111	0	DR13	DRB1*13:01		3319.39
111	8	DR13	DRB1*13:01		4936.02
111	16	DR13	DRB1*13:01		3298.31
111	24	DR13	DRB1*13:01		3794.77
111	36	DR13	DRB1*13:01		3028.1
111	52	DR13	DRB1*13:01		4267.38
111	64	DR13	DRB1*13:01		2040
111	76	DR13	DRB1*13:01		2457
111	0	DR4	DRB1*04:02		3420.99
111	8	DR4	DRB1*04:02		5371.67
111	16	DR4	DRB1*04:02		3056.78
111	24	DR4	DRB1*04:02		4224.75
111	36	DR4	DRB1*04:02		3149.46
111	52	DR4	DRB1*04:02		4207.04
111	64	DR4	DRB1*04:02		2169
111	76	DR4	DRB1*04:02		2385
112	0	DP18	DPA1*02:01DPB1*18:01		19227.47
112	8	DP18	DPA1*02:01DPB1*18:01		17485.11
112	16	DP18	DPA1*02:01DPB1*18:01		18295.84
112	24	DP18	DPA1*02:01DPB1*18:01		19384.42
112	36	DP18	DPA1*02:01DPB1*18:01		19314.39
112	52	DP18	DPA1*02:01DPB1*18:01		19066
112	64	DP18	DPA1*02:01DPB1*18:01		18132
112	76	DP18	DPA1*02:01DPB1*18:01		17793
112	0	DP2	DPA1*01:03DPB1*02:01		13271.21
112	8	DP2	DPA1*01:03DPB1*02:01		11333.31

112	16	DP2	DPA1*01:03DPB1*02:01		12665.2
112	24	DP2	DPA1*01:03DPB1*02:01		12543.44
112	36	DP2	DPA1*01:03DPB1*02:01		12947.32
112	52	DP2	DPA1*01:03DPB1*02:01		13997
112	64	DP2	DPA1*01:03DPB1*02:01		12664
112	76	DP2	DPA1*01:03DPB1*02:01		11265
112	0	DP28	DPA1*01:05DPB1*28:01		15228.95
112	8	DP28	DPA1*01:05DPB1*28:01		11979.23
112	16	DP28	DPA1*01:05DPB1*28:01		14530.03
112	24	DP28	DPA1*01:05DPB1*28:01		14575.32
112	36	DP28	DPA1*01:05DPB1*28:01		14315.21
112	52	DP28	DPA1*01:05DPB1*28:01		15930
112	64	DP28	DPA1*01:05DPB1*28:01		13879
112	76	DP28	DPA1*01:05DPB1*28:01		12533
112	0	DP3	DPA1*01:03DPB1*03:01		12681.79
112	8	DP3	DPA1*01:03DPB1*03:01		10057.51
112	16	DP3	DPA1*01:03DPB1*03:01		11692.93
112	24	DP3	DPA1*01:03DPB1*03:01		11903.79
112	36	DP3	DPA1*01:03DPB1*03:01		11990.99
112	52	DP3	DPA1*01:03DPB1*03:01		12892
112	64	DP3	DPA1*01:03DPB1*03:01		10636
112	76	DP3	DPA1*01:03DPB1*03:01		9661
112	0	DP4	DPA1*01:03DPB1*04:02		15348.41
112	8	DP4	DPA1*01:03DPB1*04:02		13261.73
112	16	DP4	DPA1*01:03DPB1*04:02		15134.97
112	24	DP4	DPA1*01:03DPB1*04:02		15414.36
112	36	DP4	DPA1*01:03DPB1*04:02		14482.34
112	52	DP4	DPA1*01:03DPB1*04:02		15985
112	64	DP4	DPA1*01:03DPB1*04:02		15268
112	76	DP4	DPA1*01:03DPB1*04:02		13328
112	0	DQ7	DQA1*05:05DQB1*03:01		13339.01
112	8	DQ7	DQA1*05:05DQB1*03:01		9765.56
112	16	DQ7	DQA1*05:05DQB1*03:01		12273.5
112	24	DQ7	DQA1*05:05DQB1*03:01		13086.25
112	36	DQ7	DQA1*05:05DQB1*03:01		12613.49
112	52	DQ7	DQA1*05:05DQB1*03:01		11759
112	64	DQ7	DQA1*05:05DQB1*03:01		9896
112	76	DQ7	DQA1*05:05DQB1*03:01		9212
112	0	DQ8	DQA1*03:02DQB1*03:02		12547.72
112	8	DQ8	DQA1*03:02DQB1*03:02		9362.01
112	16	DQ8	DQA1*03:02DQB1*03:02		11802
112	24	DQ8	DQA1*03:02DQB1*03:02		12219.15
112	36	DQ8	DQA1*03:02DQB1*03:02		11976.22
112	52	DQ8	DQA1*03:02DQB1*03:02		10736
112	64	DQ8	DQA1*03:02DQB1*03:02		9413
112	76	DQ8	DQA1*03:02DQB1*03:02		8563
112	0	DQ9	DQA1*02:01DQB1*03:03		12106.97

112	8	DQ9	DQA1*02:01DQB1*03:03		9623.4
112	16	DQ9	DQA1*02:01DQB1*03:03		12141.96
112	24	DQ9	DQA1*02:01DQB1*03:03		12796.02
112	36	DQ9	DQA1*02:01DQB1*03:03		12258.05
112	52	DQ9	DQA1*02:01DQB1*03:03		11040
112	64	DQ9	DQA1*02:01DQB1*03:03		9213
112	76	DQ9	DQA1*02:01DQB1*03:03		9348
112	0	DR11	DRB1*11:04		17653.69
112	8	DR11	DRB1*11:04		16380.44
112	16	DR11	DRB1*11:04		17886.73
112	24	DR11	DRB1*11:04		17730.43
112	36	DR11	DRB1*11:04		17543.36
112	52	DR11	DRB1*11:04		17931
112	64	DR11	DRB1*11:04		17201
112	76	DR11	DRB1*11:04		17424
112	0	DR13	DRB1*13:03		11990.18
112	8	DR13	DRB1*13:03		6881.87
112	16	DR13	DRB1*13:03		8472.67
112	24	DR13	DRB1*13:03		7876.56
112	36	DR13	DRB1*13:03		7252.08
112	52	DR13	DRB1*13:03		11665
112	64	DR13	DRB1*13:03		17721
112	76	DR13	DRB1*13:03		16128
113	0	A23	A*23:01		4932.02
113	8	A23	A*23:01		3988.19
113	16	A23	A*23:01		4684.78
113	24	A23	A*23:01		4766.27
113	36	A23	A*23:01		3128.71
113	52	A23	A*23:01		3128.71
113	64	A23	A*23:01		2401.34
113	76	A23	A*23:01		1881.48
113	0	A33	A*33:03		8332.01
113	8	A33	A*33:03		8083.89
113	16	A33	A*33:03		9107.77
113	24	A33	A*33:03		9622.05
113	36	A33	A*33:03		7761.86
113	52	A33	A*33:03		7761.86
113	64	A33	A*33:03		5409.75
113	76	A33	A*33:03		3932.68
113	0	A34	A*34:02		8647.82
113	8	A34	A*34:02		7606.01
113	16	A34	A*34:02		8788.29
113	24	A34	A*34:02		9444.27
113	36	A34	A*34:02		7891.9
113	52	A34	A*34:02		7891.9
113	64	A34	A*34:02		5474.15
113	76	A34	A*34:02		3837.34

113	0	A68	A*68:02		13016.13
113	8	A68	A*68:02		11656.3
113	16	A68	A*68:02		12849.87
113	24	A68	A*68:02		14158.17
113	36	A68	A*68:02		11917.87
113	52	A68	A*68:02		11917.87
113	64	A68	A*68:02		8250.63
113	76	A68	A*68:02		6524.03
113	0	A69	A*69:01		11420.91
113	8	A69	A*69:01		9373.98
113	16	A69	A*69:01		10254.33
113	24	A69	A*69:01		12094.56
113	36	A69	A*69:01		9511.98
113	52	A69	A*69:01		9511.98
113	64	A69	A*69:01		7045.55
113	76	A69	A*69:01		5226.58
113	0	B38Bw4	B*38:01		5789.58
113	8	B38Bw4	B*38:01		4646.15
113	16	B38Bw4	B*38:01		5104.85
113	24	B38Bw4	B*38:01		5310.79
113	36	B38Bw4	B*38:01		3486.19
113	52	B38Bw4	B*38:01		3486.19
113	64	B38Bw4	B*38:01		3281.93
113	76	B38Bw4	B*38:01		2514.92
113	0	B53Bw4	B*53:01		5142.8
113	8	B53Bw4	B*53:01		4141.54
113	16	B53Bw4	B*53:01		4565.01
113	24	B53Bw4	B*53:01		5383.56
113	36	B53Bw4	B*53:01		3593.43
113	52	B53Bw4	B*53:01		3593.43
113	64	B53Bw4	B*53:01		3175.74
113	76	B53Bw4	B*53:01		2486.32
113	0	B57Bw4	B*57:01		13926.6
113	8	B57Bw4	B*57:01		11731.32
113	16	B57Bw4	B*57:01		11953.81
113	24	B57Bw4	B*57:01		14154.22
113	36	B57Bw4	B*57:01		12338.99
113	52	B57Bw4	B*57:01		12338.99
113	64	B57Bw4	B*57:01		10648.25
113	76	B57Bw4	B*57:01		9806.69
113	0	B58Bw4	B*58:01		10031
113	8	B58Bw4	B*58:01		8458.06
113	16	B58Bw4	B*58:01		8760.09
113	24	B58Bw4	B*58:01		10393.7
113	36	B58Bw4	B*58:01		8732.8
113	52	B58Bw4	B*58:01		8732.8
113	64	B58Bw4	B*58:01		7075.56

113	76	B58Bw4	B*58:01	I	6728.02
113	0	B63Bw4	B*15:16	I	6560.87
113	8	B63Bw4	B*15:16	I	6057.36
113	16	B63Bw4	B*15:16	I	6859.09
113	24	B63Bw4	B*15:16	I	7611.62
113	36	B63Bw4	B*15:16	I	6176.71
113	52	B63Bw4	B*15:16	I	6176.71
113	64	B63Bw4	B*15:16	I	5434
113	76	B63Bw4	B*15:16	I	4639.08
113	0	DP1	DPA1*02:01DPB1*01:01	II	4418.37
113	8	DP1	DPA1*02:01DPB1*01:01	II	3789.7
113	16	DP1	DPA1*02:01DPB1*01:01	II	4745.41
113	24	DP1	DPA1*02:01DPB1*01:01	II	5272.75
113	36	DP1	DPA1*02:01DPB1*01:01	II	4105.32
113	52	DP1	DPA1*02:01DPB1*01:01	II	3583.79
113	64	DP1	DPA1*02:01DPB1*01:01	II	2468.14
113	76	DP1	DPA1*02:01DPB1*01:01	II	2399
113	0	DP14	DPA1*02:01DPB1*14:01	II	3922.31
113	8	DP14	DPA1*02:01DPB1*14:01	II	3734
113	16	DP14	DPA1*02:01DPB1*14:01	II	4539.9
113	24	DP14	DPA1*02:01DPB1*14:01	II	5305.82
113	36	DP14	DPA1*02:01DPB1*14:01	II	4170.55
113	52	DP14	DPA1*02:01DPB1*14:01	II	3426.69
113	64	DP14	DPA1*02:01DPB1*14:01	II	2344.94
113	76	DP14	DPA1*02:01DPB1*14:01	II	1956
113	0	DP3	DPA1*02:01DPB1*03:01	II	4113.24
113	8	DP3	DPA1*02:01DPB1*03:01	II	3954.87
113	16	DP3	DPA1*02:01DPB1*03:01	II	4640.61
113	24	DP3	DPA1*02:01DPB1*03:01	II	5473.57
113	36	DP3	DPA1*02:01DPB1*03:01	II	4477.76
113	52	DP3	DPA1*02:01DPB1*03:01	II	3740.92
113	64	DP3	DPA1*02:01DPB1*03:01	II	2604.32
113	76	DP3	DPA1*02:01DPB1*03:01	II	2200
113	0	DP6	DPA1*02:01DPB1*06:01	II	4346.46
113	8	DP6	DPA1*02:01DPB1*06:01	II	4263.8
113	16	DP6	DPA1*02:01DPB1*06:01	II	4983.08
113	24	DP6	DPA1*02:01DPB1*06:01	II	5360.67
113	36	DP6	DPA1*02:01DPB1*06:01	II	4627.04
113	52	DP6	DPA1*02:01DPB1*06:01	II	3840.2
113	64	DP6	DPA1*02:01DPB1*06:01	II	2820.79
113	76	DP6	DPA1*02:01DPB1*06:01	II	2474
113	0	DP9	DPA1*02:01DPB1*09:01	II	5456.27
113	8	DP9	DPA1*02:01DPB1*09:01	II	4711.6
113	16	DP9	DPA1*02:01DPB1*09:01	II	5544.58
113	24	DP9	DPA1*02:01DPB1*09:01	II	6375.28
113	36	DP9	DPA1*02:01DPB1*09:01	II	5365.39
113	52	DP9	DPA1*02:01DPB1*09:01	II	4609.93

113	64	DP9	DPA1*02:01DPB1*09:01		3300.15
113	76	DP9	DPA1*02:01DPB1*09:01		2747
113	0	DQ2	DQA1*03:01DQB1*02:01		19478.46
113	8	DQ2	DQA1*03:01DQB1*02:01		18040.64
113	16	DQ2	DQA1*03:01DQB1*02:01		20166.7
113	24	DQ2	DQA1*03:01DQB1*02:01		19930.06
113	36	DQ2	DQA1*03:01DQB1*02:01		19922.79
113	52	DQ2	DQA1*03:01DQB1*02:01		17451.13
113	64	DQ2	DQA1*03:01DQB1*02:01		18712.57
113	76	DQ2	DQA1*03:01DQB1*02:01		19045
113	0	DQ4	DQA1*04:01DQB1*04:02		15410.13
113	8	DQ4	DQA1*04:01DQB1*04:02		15132.33
113	16	DQ4	DQA1*04:01DQB1*04:02		17216.88
113	24	DQ4	DQA1*04:01DQB1*04:02		15999.48
113	36	DQ4	DQA1*04:01DQB1*04:02		15226.3
113	52	DQ4	DQA1*04:01DQB1*04:02		13299.9
113	64	DQ4	DQA1*04:01DQB1*04:02		13139.29
113	76	DQ4	DQA1*04:01DQB1*04:02		13336
113	0	DQ7	DQA1*05:05DQB1*03:01		18976.42
113	8	DQ7	DQA1*05:05DQB1*03:01		17652.58
113	16	DQ7	DQA1*05:05DQB1*03:01		20383.23
113	24	DQ7	DQA1*05:05DQB1*03:01		20062.95
113	36	DQ7	DQA1*05:05DQB1*03:01		18018.21
113	52	DQ7	DQA1*05:05DQB1*03:01		16396.25
113	64	DQ7	DQA1*05:05DQB1*03:01		16335.42
113	76	DQ7	DQA1*05:05DQB1*03:01		17534
113	0	DQ8	DQA1*03:02DQB1*03:02		11390.02
113	8	DQ8	DQA1*03:02DQB1*03:02		10614.97
113	16	DQ8	DQA1*03:02DQB1*03:02		12838.06
113	24	DQ8	DQA1*03:02DQB1*03:02		15613.1
113	36	DQ8	DQA1*03:02DQB1*03:02		11920.14
113	52	DQ8	DQA1*03:02DQB1*03:02		10739.73
113	64	DQ8	DQA1*03:02DQB1*03:02		9461.29
113	76	DQ8	DQA1*03:02DQB1*03:02		9724
113	0	DQ9	DQA1*03:02DQB1*03:03		11099.42
113	8	DQ9	DQA1*03:02DQB1*03:03		9929.11
113	16	DQ9	DQA1*03:02DQB1*03:03		11963.86
113	24	DQ9	DQA1*03:02DQB1*03:03		14591.9
113	36	DQ9	DQA1*03:02DQB1*03:03		10906.73
113	52	DQ9	DQA1*03:02DQB1*03:03		9769.04
113	64	DQ9	DQA1*03:02DQB1*03:03		8373.18
113	76	DQ9	DQA1*03:02DQB1*03:03		8597
115	0	A80	A*80:01		15749.24
115	8	A80	A*80:01		37.09
115	16	A80	A*80:01		25.27
115	24	A80	A*80:01		30.8
115	0	B13Bw4	B*13:01		10564.93

115	8	B13Bw4	B*13:01	I	5857.74
115	16	B13Bw4	B*13:01	I	5861.21
115	24	B13Bw4	B*13:01	I	5756.74
115	0	B48Bw6	B*48:01	I	11769.85
115	8	B48Bw6	B*48:01	I	11119.13
115	16	B48Bw6	B*48:01	I	11056.39
115	24	B48Bw6	B*48:01	I	10851.16
115	0	B49Bw4	B*49:01	I	11761.45
115	8	B49Bw4	B*49:01	I	13011.2
115	16	B49Bw4	B*49:01	I	12802.28
115	24	B49Bw4	B*49:01	I	14445.09
115	0	B60Bw6	B*40:01	I	9926.21
115	8	B60Bw6	B*40:01	I	12652.36
115	16	B60Bw6	B*40:01	I	12156.53
115	24	B60Bw6	B*40:01	I	11440.77
115	0	B62Bw6	B*15:01	I	10737.11
115	8	B62Bw6	B*15:01	I	16715.91
115	16	B62Bw6	B*15:01	I	17234.59
115	24	B62Bw6	B*15:01	I	17822.1
115	0	B65Bw6	B*14:02	I	14520.93
115	8	B65Bw6	B*14:02	I	2272.31
115	16	B65Bw6	B*14:02	I	2552.81
115	24	B65Bw6	B*14:02	I	2332.99
115	0	B72Bw6	B*15:03	I	11168.33
115	8	B72Bw6	B*15:03	I	11365.14
115	16	B72Bw6	B*15:03	I	11241.3
115	24	B72Bw6	B*15:03	I	12019.61
115	0	B78Bw6	B*78:01	I	16697.67
115	8	B78Bw6	B*78:01	I	4881.52
115	16	B78Bw6	B*78:01	I	5054.99
115	24	B78Bw6	B*78:01	I	4792.79
115	0	Cw10	C*03:02	I	11563.53
115	8	Cw10	C*03:02	I	8522.5
115	16	Cw10	C*03:02	I	7784.81
115	24	Cw10	C*03:02	I	7894.67
115	0	DQ4	DQA1*03:03DQB1*04:01	II	21203.33
115	8	DQ4	DQA1*03:03DQB1*04:01	II	21043.56
115	16	DQ4	DQA1*03:03DQB1*04:01	II	18681.44
115	24	DQ4	DQA1*03:03DQB1*04:01	II	17353.45
115	0	DQ5	DQA1*01:01DQB1*05:01	II	21327.03
115	8	DQ5	DQA1*01:01DQB1*05:01	II	21303.95
115	16	DQ5	DQA1*01:01DQB1*05:01	II	19494.44
115	24	DQ5	DQA1*01:01DQB1*05:01	II	17299.55
115	0	DQ6	DQA1*01:02DQB1*06:09	II	21756.3
115	8	DQ6	DQA1*01:02DQB1*06:09	II	20807.88
115	16	DQ6	DQA1*01:02DQB1*06:09	II	18884.65
115	24	DQ6	DQA1*01:02DQB1*06:09	II	17500.94

115	0	DR15	DRB1*15:01		9061.84
115	8	DR15	DRB1*15:01		7259.76
115	16	DR15	DRB1*15:01		6189.42
115	24	DR15	DRB1*15:01		10226.54
115	0	DR51	DRB5*02:02		3584.03
115	8	DR51	DRB5*02:02		2335.63
115	16	DR51	DRB5*02:02		2195.34
115	24	DR51	DRB5*02:02		5540.3
116	0	A1	A*01:01		6782.49
116	8	A1	A*01:01		4749.81
116	16	A1	A*01:01		3622.28
116	24	A1	A*01:01		1778.47
116	36	A1	A*01:01		1361.01
116	52	A1	A*01:01		861.2
116	64	A1	A*01:01		1325.83
116	76	A1	A*01:01		975.12
116	0	A23	A*23:01		16547.21
116	8	A23	A*23:01		16354.74
116	16	A23	A*23:01		15845.48
116	24	A23	A*23:01		12607.62
116	36	A23	A*23:01		13230.35
116	52	A23	A*23:01		10239.79
116	64	A23	A*23:01		8538.16
116	76	A23	A*23:01		10327.62
116	0	A24	A*24:02		12545.83
116	8	A24	A*24:02		14017.23
116	16	A24	A*24:02		13203.07
116	24	A24	A*24:02		10071.89
116	36	A24	A*24:02		10831.01
116	52	A24	A*24:02		7407.65
116	64	A24	A*24:02		6739.98
116	76	A24	A*24:02		8894.45
116	0	A80	A*80:01		10878.23
116	8	A80	A*80:01		7502.5
116	16	A80	A*80:01		5430.7
116	24	A80	A*80:01		3307.54
116	36	A80	A*80:01		2546.57
116	52	A80	A*80:01		1436.68
116	64	A80	A*80:01		1528.65
116	76	A80	A*80:01		1340.74
116	0	B44Bw4	B*44:03		14278.71
116	8	B44Bw4	B*44:03		14494.99
116	16	B44Bw4	B*44:03		12298.65
116	24	B44Bw4	B*44:03		10651.53
116	36	B44Bw4	B*44:03		9855.58
116	52	B44Bw4	B*44:03		8029.34
116	64	B44Bw4	B*44:03		7292.77

116	76	B44Bw4	B*44:03	I	6865.62
116	0	B45Bw6	B*45:01	I	18816.09
116	8	B45Bw6	B*45:01	I	17593.84
116	16	B45Bw6	B*45:01	I	16017.7
116	24	B45Bw6	B*45:01	I	13668.19
116	36	B45Bw6	B*45:01	I	12843.74
116	52	B45Bw6	B*45:01	I	10767.92
116	64	B45Bw6	B*45:01	I	9378.85
116	76	B45Bw6	B*45:01	I	8698.15
116	0	B76Bw6	B*15:12	I	14848.03
116	8	B76Bw6	B*15:12	I	14232.73
116	16	B76Bw6	B*15:12	I	12875.35
116	24	B76Bw6	B*15:12	I	10359.88
116	36	B76Bw6	B*15:12	I	9297.06
116	52	B76Bw6	B*15:12	I	7262
116	64	B76Bw6	B*15:12	I	6661.93
116	76	B76Bw6	B*15:12	I	5999.88
116	0	B82Bw6	B*82:01	I	10626.77
116	8	B82Bw6	B*82:01	I	10374.01
116	16	B82Bw6	B*82:01	I	8778.3
116	24	B82Bw6	B*82:01	I	7010.94
116	36	B82Bw6	B*82:01	I	5802.15
116	52	B82Bw6	B*82:01	I	4735.97
116	64	B82Bw6	B*82:01	I	4305.62
116	76	B82Bw6	B*82:01	I	3963.76
116	0	Cw15	C*15:02	I	8198.52
116	8	Cw15	C*15:02	I	6793.64
116	16	Cw15	C*15:02	I	5620.6
116	24	Cw15	C*15:02	I	4550.49
116	36	Cw15	C*15:02	I	3722.09
116	52	Cw15	C*15:02	I	3023.88
116	64	Cw15	C*15:02	I	2105.55
116	76	Cw15	C*15:02	I	1760.1
116	0	Cw2	C*02:02	I	14680.51
116	8	Cw2	C*02:02	I	14011.42
116	16	Cw2	C*02:02	I	12986.76
116	24	Cw2	C*02:02	I	11754.31
116	36	Cw2	C*02:02	I	10150.7
116	52	Cw2	C*02:02	I	7781.73
116	64	Cw2	C*02:02	I	6427.79
116	76	Cw2	C*02:02	I	5981.56
116	0	DP17	DPA1*02:01DPB1*17:01	II	14751.36
116	8	DP17	DPA1*02:01DPB1*17:01	II	14795.71
116	16	DP17	DPA1*02:01DPB1*17:01	II	13118.5
116	24	DP17	DPA1*02:01DPB1*17:01	II	11447.84
116	36	DP17	DPA1*02:01DPB1*17:01	II	10310.83
116	52	DP17	DPA1*02:01DPB1*17:01	II	7002.8

116	64	DP17	DPA1*02:01DPB1*17:01		4845
116	76	DP17	DPA1*02:01DPB1*17:01		4856
116	0	DP18	DPA1*02:01DPB1*18:01		21985.9
116	8	DP18	DPA1*02:01DPB1*18:01		21015.2
116	16	DP18	DPA1*02:01DPB1*18:01		20906.98
116	24	DP18	DPA1*02:01DPB1*18:01		19877.69
116	36	DP18	DPA1*02:01DPB1*18:01		17608.78
116	52	DP18	DPA1*02:01DPB1*18:01		12879.79
116	64	DP18	DPA1*02:01DPB1*18:01		8818
116	76	DP18	DPA1*02:01DPB1*18:01		9433
116	0	DP2	DPA1*01:03DPB1*02:01		19180.06
116	8	DP2	DPA1*01:03DPB1*02:01		18442.81
116	16	DP2	DPA1*01:03DPB1*02:01		18892.15
116	24	DP2	DPA1*01:03DPB1*02:01		17732.29
116	36	DP2	DPA1*01:03DPB1*02:01		16636.43
116	52	DP2	DPA1*01:03DPB1*02:01		13406.13
116	64	DP2	DPA1*01:03DPB1*02:01		11725
116	76	DP2	DPA1*01:03DPB1*02:01		10900
116	0	DP28	DPA1*01:05DPB1*28:01		20541.46
116	8	DP28	DPA1*01:05DPB1*28:01		19400.81
116	16	DP28	DPA1*01:05DPB1*28:01		19838.58
116	24	DP28	DPA1*01:05DPB1*28:01		19838.33
116	36	DP28	DPA1*01:05DPB1*28:01		18621.51
116	52	DP28	DPA1*01:05DPB1*28:01		15499.08
116	64	DP28	DPA1*01:05DPB1*28:01		12191
116	76	DP28	DPA1*01:05DPB1*28:01		11808
116	0	DP3	DPA1*01:03DPB1*03:01		18735.77
116	8	DP3	DPA1*01:03DPB1*03:01		17767.67
116	16	DP3	DPA1*01:03DPB1*03:01		16650.48
116	24	DP3	DPA1*01:03DPB1*03:01		15238.14
116	36	DP3	DPA1*01:03DPB1*03:01		13343.24
116	52	DP3	DPA1*01:03DPB1*03:01		9989.91
116	64	DP3	DPA1*01:03DPB1*03:01		7837
116	76	DP3	DPA1*01:03DPB1*03:01		7104
116	0	DP4	DPA1*01:03DPB1*04:01		20976.1
116	8	DP4	DPA1*01:03DPB1*04:01		21256.51
116	16	DP4	DPA1*01:03DPB1*04:01		20891.97
116	24	DP4	DPA1*01:03DPB1*04:01		20137.22
116	36	DP4	DPA1*01:03DPB1*04:01		18736.35
116	52	DP4	DPA1*01:03DPB1*04:01		15782.17
116	64	DP4	DPA1*01:03DPB1*04:01		13972
116	76	DP4	DPA1*01:03DPB1*04:01		14014
116	0	DP9	DPA1*02:01DPB1*09:01		15838.41
116	8	DP9	DPA1*02:01DPB1*09:01		16647.46
116	16	DP9	DPA1*02:01DPB1*09:01		14834.14
116	24	DP9	DPA1*02:01DPB1*09:01		13157.63
116	36	DP9	DPA1*02:01DPB1*09:01		11493.65

116	52	DP9	DPA1*02:01DPB1*09:01		7681.62
116	64	DP9	DPA1*02:01DPB1*09:01		5604
116	76	DP9	DPA1*02:01DPB1*09:01		5134
116	0	DQ6	DQA1*01:03DQB1*06:01		20979.38
116	8	DQ6	DQA1*01:03DQB1*06:01		12686.73
116	16	DQ6	DQA1*01:03DQB1*06:01		15302.91
116	24	DQ6	DQA1*01:03DQB1*06:01		20576.07
116	36	DQ6	DQA1*01:03DQB1*06:01		14223.45
116	52	DQ6	DQA1*01:03DQB1*06:01		20000.85
116	64	DQ6	DQA1*01:03DQB1*06:01		17692
116	76	DQ6	DQA1*01:03DQB1*06:01		9607
116	0	DQ8	DQA1*03:02DQB1*03:02		20356.22
116	8	DQ8	DQA1*03:02DQB1*03:02		12414.96
116	16	DQ8	DQA1*03:02DQB1*03:02		14330.6
116	24	DQ8	DQA1*03:02DQB1*03:02		19417.76
116	36	DQ8	DQA1*03:02DQB1*03:02		13684.38
116	52	DQ8	DQA1*03:02DQB1*03:02		17194.05
116	64	DQ8	DQA1*03:02DQB1*03:02		13845
116	76	DQ8	DQA1*03:02DQB1*03:02		11661
116	0	DQ9	DQA1*02:01DQB1*03:03		19514.94
116	8	DQ9	DQA1*02:01DQB1*03:03		13081.61
116	16	DQ9	DQA1*02:01DQB1*03:03		14776.12
116	24	DQ9	DQA1*02:01DQB1*03:03		19244.17
116	36	DQ9	DQA1*02:01DQB1*03:03		14358.88
116	52	DQ9	DQA1*02:01DQB1*03:03		16473.59
116	64	DQ9	DQA1*02:01DQB1*03:03		14975
116	76	DQ9	DQA1*02:01DQB1*03:03		11942
117	0	B49Bw4	B*49:01		12287.75
117	8	B49Bw4	B*49:01		13526.68
117	16	B49Bw4	B*49:01		10954.75
117	24	B49Bw4	B*49:01		11621.57
117	36	B49Bw4	B*49:01		10246.43
117	52	B49Bw4	B*49:01		11672
117	64	B49Bw4	B*49:01		10938
117	76	B49Bw4	B*49:01		8493
117	0	B50Bw6	B*50:01		12060
117	8	B50Bw6	B*50:01		13909.75
117	16	B50Bw6	B*50:01		11200
117	24	B50Bw6	B*50:01		12047.99
117	36	B50Bw6	B*50:01		10812.41
117	52	B50Bw6	B*50:01		11816
117	64	B50Bw6	B*50:01		11959
117	76	B50Bw6	B*50:01		9160
117	0	B51Bw4	B*51:02		8286.64
117	8	B51Bw4	B*51:02		9956.99
117	16	B51Bw4	B*51:02		7005.27
117	24	B51Bw4	B*51:02		8189.76

117	36	B51Bw4	B*51:02		6819.88
117	52	B51Bw4	B*51:02		7601
117	64	B51Bw4	B*51:02		7459
117	76	B51Bw4	B*51:02		5530
117	0	B52Bw4	B*52:01		11834.71
117	8	B52Bw4	B*52:01		14007.98
117	16	B52Bw4	B*52:01		10643.44
117	24	B52Bw4	B*52:01		11926.89
117	36	B52Bw4	B*52:01		10131.66
117	52	B52Bw4	B*52:01		11412
117	64	B52Bw4	B*52:01		10985
117	76	B52Bw4	B*52:01		8728
117	0	B56Bw6	B*56:01		13681.15
117	8	B56Bw6	B*56:01		15620.19
117	16	B56Bw6	B*56:01		12561.67
117	24	B56Bw6	B*56:01		13916.36
117	36	B56Bw6	B*56:01		12599.66
117	52	B56Bw6	B*56:01		13624
117	64	B56Bw6	B*56:01		14034
117	76	B56Bw6	B*56:01		11631
117	0	B57Bw4	B*57:01		8336.5
117	8	B57Bw4	B*57:01		9513.37
117	16	B57Bw4	B*57:01		6321.04
117	24	B57Bw4	B*57:01		7434.18
117	36	B57Bw4	B*57:01		6377.43
117	52	B57Bw4	B*57:01		7051
117	64	B57Bw4	B*57:01		7355
117	76	B57Bw4	B*57:01		5057
117	0	B62Bw6	B*15:01		11135.36
117	8	B62Bw6	B*15:01		13313.2
117	16	B62Bw6	B*15:01		10056.95
117	24	B62Bw6	B*15:01		10739.92
117	36	B62Bw6	B*15:01		9293.99
117	52	B62Bw6	B*15:01		10192
117	64	B62Bw6	B*15:01		10357
117	76	B62Bw6	B*15:01		7827
117	0	B63Bw4	B*15:16		9546.13
117	8	B63Bw4	B*15:16		11081.58
117	16	B63Bw4	B*15:16		8342.28
117	24	B63Bw4	B*15:16		9057.43
117	36	B63Bw4	B*15:16		7813.69
117	52	B63Bw4	B*15:16		8632
117	64	B63Bw4	B*15:16		8443
117	76	B63Bw4	B*15:16		6607
117	0	B71Bw6	B*15:10		9172.16
117	8	B71Bw6	B*15:10		10601.31
117	16	B71Bw6	B*15:10		8546.08

117	24	B71Bw6	B*15:10	I	8722.19
117	36	B71Bw6	B*15:10	I	7915.15
117	52	B71Bw6	B*15:10	I	8784
117	64	B71Bw6	B*15:10	I	8708
117	76	B71Bw6	B*15:10	I	6477
117	0	B72Bw6	B*15:03	I	9621.58
117	8	B72Bw6	B*15:03	I	11022.75
117	16	B72Bw6	B*15:03	I	8460.09
117	24	B72Bw6	B*15:03	I	9080.21
117	36	B72Bw6	B*15:03	I	8160.68
117	52	B72Bw6	B*15:03	I	8824
117	64	B72Bw6	B*15:03	I	8907
117	76	B72Bw6	B*15:03	I	6682
117	0	DQ2	DQA1*05:01DQB1*02:01	II	18613.51
117	8	DQ2	DQA1*05:01DQB1*02:01	II	19118.26
117	16	DQ2	DQA1*05:01DQB1*02:01	II	19486.25
117	24	DQ2	DQA1*05:01DQB1*02:01	II	18452.08
117	36	DQ2	DQA1*05:01DQB1*02:01	II	18768.92
117	52	DQ2	DQA1*05:01DQB1*02:01	II	18334
117	64	DQ2	DQA1*05:01DQB1*02:01	II	19051
117	76	DQ2	DQA1*05:01DQB1*02:01	II	18531
117	0	DQ4	DQA1*04:01DQB1*04:02	II	7661.05
117	8	DQ4	DQA1*04:01DQB1*04:02	II	6975.06
117	16	DQ4	DQA1*04:01DQB1*04:02	II	6966.45
117	24	DQ4	DQA1*04:01DQB1*04:02	II	6272.34
117	36	DQ4	DQA1*04:01DQB1*04:02	II	5871.89
117	52	DQ4	DQA1*04:01DQB1*04:02	II	6425
117	64	DQ4	DQA1*04:01DQB1*04:02	II	6309
117	76	DQ4	DQA1*04:01DQB1*04:02	II	5406
117	0	DQ7	DQA1*05:05DQB1*03:01	II	11217.91
117	8	DQ7	DQA1*05:05DQB1*03:01	II	10859.54
117	16	DQ7	DQA1*05:05DQB1*03:01	II	10534.97
117	24	DQ7	DQA1*05:05DQB1*03:01	II	9758
117	36	DQ7	DQA1*05:05DQB1*03:01	II	9513
117	52	DQ7	DQA1*05:05DQB1*03:01	II	10395
117	64	DQ7	DQA1*05:05DQB1*03:01	II	9769
117	76	DQ7	DQA1*05:05DQB1*03:01	II	7854
117	0	DR13	DRB1*13:03	II	2347.7
117	8	DR13	DRB1*13:03	II	2075.28
117	16	DR13	DRB1*13:03	II	1781.24
117	24	DR13	DRB1*13:03	II	1575.6
117	36	DR13	DRB1*13:03	II	1719.17
117	52	DR13	DRB1*13:03	II	1835
117	64	DR13	DRB1*13:03	II	1846
117	76	DR13	DRB1*13:03	II	1540
117	0	DR17	DRB1*03:01	II	7268.24
117	8	DR17	DRB1*03:01	II	7030.09

117	16	DR17	DRB1*03:01		6646.37
117	24	DR17	DRB1*03:01		5734
117	36	DR17	DRB1*03:01		5636.18
117	52	DR17	DRB1*03:01		5140
117	64	DR17	DRB1*03:01		5143
117	76	DR17	DRB1*03:01		3974
117	0	DR18	DRB1*03:02		5551.43
117	8	DR18	DRB1*03:02		5519.57
117	16	DR18	DRB1*03:02		5066.48
117	24	DR18	DRB1*03:02		4304.97
117	36	DR18	DRB1*03:02		4417.43
117	52	DR18	DRB1*03:02		3885
117	64	DR18	DRB1*03:02		3909
117	76	DR18	DRB1*03:02		2893
117	0	DR52	DRB3*01:01		4177.2
117	8	DR52	DRB3*01:01		4190.73
117	16	DR52	DRB3*01:01		4026.45
117	24	DR52	DRB3*01:01		3210.51
117	36	DR52	DRB3*01:01		3585.03
117	52	DR52	DRB3*01:01		3531
117	64	DR52	DRB3*01:01		3186
117	76	DR52	DRB3*01:01		2389
118	0	A2	A*02:06		15278
118	8	A2	A*02:06		15383
118	16	A2	A*02:06		17628
118	24	A2	A*02:06		15912
118	36	A2	A*02:06		13358
118	52	A2	A*02:06		16747
118	64	A2	A*02:06		18414.11
118	76	A2	A*02:06		17850.86
118	0	A24	A*24:03		10320
118	8	A24	A*24:03		6186
118	16	A24	A*24:03		5312
118	24	A24	A*24:03		6944
118	36	A24	A*24:03		5999
118	52	A24	A*24:03		5108
118	64	A24	A*24:03		4677.23
118	76	A24	A*24:03		7305.64
118	0	A31	A*31:01		6412
118	8	A31	A*31:01		2422
118	16	A31	A*31:01		1553
118	24	A31	A*31:01		2291
118	36	A31	A*31:01		1380
118	52	A31	A*31:01		8691
118	64	A31	A*31:01		8611.69
118	76	A31	A*31:01		7143.69
118	0	A68	A*68:02		14453

118	8	A68	A*68:02		8862
118	16	A68	A*68:02		7663
118	24	A68	A*68:02		8714
118	36	A68	A*68:02		7203
118	52	A68	A*68:02		15549
118	64	A68	A*68:02		11833.89
118	76	A68	A*68:02		11305.42
118	0	A69	A*69:01		14193
118	8	A69	A*69:01		9098
118	16	A69	A*69:01		7904
118	24	A69	A*69:01		9387
118	36	A69	A*69:01		7448
118	52	A69	A*69:01		16027
118	64	A69	A*69:01		10181.12
118	76	A69	A*69:01		10154.59
118	0	A74	A*74:01		6369
118	8	A74	A*74:01		2266
118	16	A74	A*74:01		1508
118	24	A74	A*74:01		2201
118	36	A74	A*74:01		1162
118	52	A74	A*74:01		9843
118	64	A74	A*74:01		8030.5
118	76	A74	A*74:01		6633.53
118	0	B57Bw4	B*57:01		17627
118	8	B57Bw4	B*57:01		17786
118	16	B57Bw4	B*57:01		19645
118	24	B57Bw4	B*57:01		17219
118	36	B57Bw4	B*57:01		17004
118	52	B57Bw4	B*57:01		16794
118	64	B57Bw4	B*57:01		18577.98
118	76	B57Bw4	B*57:01		20058.54
118	0	B58Bw4	B*58:01		20238
118	8	B58Bw4	B*58:01		18677
118	16	B58Bw4	B*58:01		18159
118	24	B58Bw4	B*58:01		17820
118	36	B58Bw4	B*58:01		17021
118	52	B58Bw4	B*58:01		15240
118	64	B58Bw4	B*58:01		15144.82
118	76	B58Bw4	B*58:01		16518.98
118	0	B64Bw6	B*14:01		8458
118	8	B64Bw6	B*14:01		4672
118	16	B64Bw6	B*14:01		4611
118	24	B64Bw6	B*14:01		5119
118	36	B64Bw6	B*14:01		4092
118	52	B64Bw6	B*14:01		3621
118	64	B64Bw6	B*14:01		2382.04
118	76	B64Bw6	B*14:01		3742.82

118	0	B65Bw6	B*14:02	I	11729
118	8	B65Bw6	B*14:02	I	7266
118	16	B65Bw6	B*14:02	I	6983
118	24	B65Bw6	B*14:02	I	7667
118	36	B65Bw6	B*14:02	I	6339
118	52	B65Bw6	B*14:02	I	5564
118	64	B65Bw6	B*14:02	I	3968.42
118	76	B65Bw6	B*14:02	I	5375.23
118	0	DR53	DRB4*01:03	II	5548
118	8	DR53	DRB4*01:03	II	6323
118	16	DR53	DRB4*01:03	II	5215
118	24	DR53	DRB4*01:03	II	5689
118	36	DR53	DRB4*01:03	II	3899
118	52	DR53	DRB4*01:03	II	7424
118	64	DR53	DRB4*01:03	II	4296.1
118	76	DR53	DRB4*01:03	II	3874.12
118	0	DR7	DRB1*07:01	II	2820
118	8	DR7	DRB1*07:01	II	3001
118	16	DR7	DRB1*07:01	II	2409
118	24	DR7	DRB1*07:01	II	2487
118	36	DR7	DRB1*07:01	II	1827
118	52	DR7	DRB1*07:01	II	3944
118	64	DR7	DRB1*07:01	II	3700.94
118	76	DR7	DRB1*07:01	II	4068.65
119	0	B27Bw4	B*27:05	I	4424.96
119	8	B27Bw4	B*27:05	I	3497.06
119	16	B27Bw4	B*27:05	I	3670.51
119	24	B27Bw4	B*27:05	I	3900.61
119	36	B27Bw4	B*27:05	I	3866.68
119	52	B27Bw4	B*27:05	I	3051.37
119	64	B27Bw4	B*27:05	I	2149.4
119	76	B27Bw4	B*27:05	I	1368.55
119	0	B27Bw6	B*27:08	I	7100.13
119	8	B27Bw6	B*27:08	I	6000.43
119	16	B27Bw6	B*27:08	I	6173.2
119	24	B27Bw6	B*27:08	I	7052.98
119	36	B27Bw6	B*27:08	I	7008.21
119	52	B27Bw6	B*27:08	I	6342.29
119	64	B27Bw6	B*27:08	I	4771.11
119	76	B27Bw6	B*27:08	I	3578.86
119	0	B55Bw6	B*55:01	I	5037.06
119	8	B55Bw6	B*55:01	I	3465.78
119	16	B55Bw6	B*55:01	I	4198.96
119	24	B55Bw6	B*55:01	I	4997.61
119	36	B55Bw6	B*55:01	I	4415.81
119	52	B55Bw6	B*55:01	I	3739.88
119	64	B55Bw6	B*55:01	I	3063.3

119	76	B55Bw6	B*55:01		2309.47
119	0	B56Bw6	B*56:01		4611.93
119	8	B56Bw6	B*56:01		3711.72
119	16	B56Bw6	B*56:01		4886.67
119	24	B56Bw6	B*56:01		5575.79
119	36	B56Bw6	B*56:01		4394.07
119	52	B56Bw6	B*56:01		4414.25
119	64	B56Bw6	B*56:01		3663.06
119	76	B56Bw6	B*56:01		2606.22
119	0	B73Bw6	B*73:01		7215.77
119	8	B73Bw6	B*73:01		5964.2
119	16	B73Bw6	B*73:01		7155.27
119	24	B73Bw6	B*73:01		8154.63
119	36	B73Bw6	B*73:01		7072.46
119	52	B73Bw6	B*73:01		6022.62
119	64	B73Bw6	B*73:01		4987.61
119	76	B73Bw6	B*73:01		3382.78
119	0	B7Bw6	B*07:02		14397.59
119	8	B7Bw6	B*07:02		10846.48
119	16	B7Bw6	B*07:02		15266.36
119	24	B7Bw6	B*07:02		16018.11
119	36	B7Bw6	B*07:02		12893.55
119	52	B7Bw6	B*07:02		13786.76
119	64	B7Bw6	B*07:02		12231.11
119	76	B7Bw6	B*07:02		10756.17
119	0	B81Bw6	B*81:01		12719.82
119	8	B81Bw6	B*81:01		10882.11
119	16	B81Bw6	B*81:01		12522.76
119	24	B81Bw6	B*81:01		12977.81
119	36	B81Bw6	B*81:01		9828.71
119	52	B81Bw6	B*81:01		10627.81
119	64	B81Bw6	B*81:01		8808.27
119	76	B81Bw6	B*81:01		7829.52
119	0	Cw10	C*03:04		4183.18
119	8	Cw10	C*03:04		2936.44
119	16	Cw10	C*03:04		3485.47
119	24	Cw10	C*03:04		3550.94
119	36	Cw10	C*03:04		3429.75
119	52	Cw10	C*03:04		2545.71
119	64	Cw10	C*03:04		1614.56
119	76	Cw10	C*03:04		812.12
119	0	Cw7	C*07:02		9478.82
119	8	Cw7	C*07:02		7537.85
119	16	Cw7	C*07:02		8887.21
119	24	Cw7	C*07:02		10194.16
119	36	Cw7	C*07:02		7527.32
119	52	Cw7	C*07:02		8058.18

119	64	Cw7	C*07:02	I	6428.85
119	76	Cw7	C*07:02	I	4728.17
119	0	Cw8	C*08:01	I	7093.62
119	8	Cw8	C*08:01	I	5391.95
119	16	Cw8	C*08:01	I	6733.25
119	24	Cw8	C*08:01	I	7823.36
119	36	Cw8	C*08:01	I	5756.16
119	52	Cw8	C*08:01	I	5924.67
119	64	Cw8	C*08:01	I	4713.16
119	76	Cw8	C*08:01	I	3070.76
119	0	DQ4	DQA1*04:01DQB1*04:02	II	17687.64
119	8	DQ4	DQA1*04:01DQB1*04:02	II	18886.46
119	16	DQ4	DQA1*04:01DQB1*04:02	II	16112.13
119	24	DQ4	DQA1*04:01DQB1*04:02	II	20313.73
119	36	DQ4	DQA1*04:01DQB1*04:02	II	20619.82
119	52	DQ4	DQA1*04:01DQB1*04:02	II	19717.43
119	64	DQ4	DQA1*04:01DQB1*04:02	II	19518.54
119	76	DQ4	DQA1*04:01DQB1*04:02	II	18486
119	0	DQ5	DQA1*01:02DQB1*05:02	II	16874.25
119	8	DQ5	DQA1*01:02DQB1*05:02	II	18689.08
119	16	DQ5	DQA1*01:02DQB1*05:02	II	17490.64
119	24	DQ5	DQA1*01:02DQB1*05:02	II	21524.73
119	36	DQ5	DQA1*01:02DQB1*05:02	II	20265.33
119	52	DQ5	DQA1*01:02DQB1*05:02	II	21339.19
119	64	DQ5	DQA1*01:02DQB1*05:02	II	21246.72
119	76	DQ5	DQA1*01:02DQB1*05:02	II	19537
119	0	DQ6	DQA1*01:02DQB1*06:04	II	17894.4
119	8	DQ6	DQA1*01:02DQB1*06:04	II	17409.01
119	16	DQ6	DQA1*01:02DQB1*06:04	II	16746.17
119	24	DQ6	DQA1*01:02DQB1*06:04	II	22250.09
119	36	DQ6	DQA1*01:02DQB1*06:04	II	19472.68
119	52	DQ6	DQA1*01:02DQB1*06:04	II	20966.68
119	64	DQ6	DQA1*01:02DQB1*06:04	II	20701.03
119	76	DQ6	DQA1*01:02DQB1*06:04	II	18487
119	0	DQ8	DQA1*03:02DQB1*03:02	II	11308.95
119	8	DQ8	DQA1*03:02DQB1*03:02	II	12302.38
119	16	DQ8	DQA1*03:02DQB1*03:02	II	12310.45
119	24	DQ8	DQA1*03:02DQB1*03:02	II	17416.16
119	36	DQ8	DQA1*03:02DQB1*03:02	II	13000.55
119	52	DQ8	DQA1*03:02DQB1*03:02	II	16902.98
119	64	DQ8	DQA1*03:02DQB1*03:02	II	15785.34
119	76	DQ8	DQA1*03:02DQB1*03:02	II	13089
119	0	DQ9	DQA1*03:02DQB1*03:03	II	12352.72
119	8	DQ9	DQA1*03:02DQB1*03:03	II	12967.89
119	16	DQ9	DQA1*03:02DQB1*03:03	II	12650.03
119	24	DQ9	DQA1*03:02DQB1*03:03	II	17905.33
119	36	DQ9	DQA1*03:02DQB1*03:03	II	14521.29

119	52	DQ9	DQA1*03:02DQB1*03:03		17120.62
119	64	DQ9	DQA1*03:02DQB1*03:03		16504.88
119	76	DQ9	DQA1*03:02DQB1*03:03		13708
119	0	DR1	DRB1*01:01		15606.84
119	8	DR1	DRB1*01:01		17060.68
119	16	DR1	DRB1*01:01		13669.69
119	24	DR1	DRB1*01:01		17945.17
119	36	DR1	DRB1*01:01		18293.35
119	52	DR1	DRB1*01:01		16915.04
119	64	DR1	DRB1*01:01		16718.88
119	76	DR1	DRB1*01:01		14605
119	0	DR103	DRB1*01:03		15337.07
119	8	DR103	DRB1*01:03		17117
119	16	DR103	DRB1*01:03		12670.87
119	24	DR103	DRB1*01:03		17974.41
119	36	DR103	DRB1*01:03		18514.7
119	52	DR103	DRB1*01:03		16698.15
119	64	DR103	DRB1*01:03		16918.17
119	76	DR103	DRB1*01:03		14996
119	0	DR16	DRB1*16:01		13171.31
119	8	DR16	DRB1*16:01		13102.18
119	16	DR16	DRB1*16:01		9250.52
119	24	DR16	DRB1*16:01		13011.91
119	36	DR16	DRB1*16:01		12911.34
119	52	DR16	DRB1*16:01		11467.78
119	64	DR16	DRB1*16:01		9901.86
119	76	DR16	DRB1*16:01		8906
119	0	DR51	DRB5*01:01		18872.5
119	8	DR51	DRB5*01:01		17971.33
119	16	DR51	DRB5*01:01		17604.87
119	24	DR51	DRB5*01:01		22056.38
119	36	DR51	DRB5*01:01		20020.59
119	52	DR51	DRB5*01:01		21383.03
119	64	DR51	DRB5*01:01		21035.43
119	76	DR51	DRB5*01:01		18562
119	0	DR9	DRB1*09:02		17809.95
119	8	DR9	DRB1*09:02		19013.6
119	16	DR9	DRB1*09:02		14600.52
119	24	DR9	DRB1*09:02		19181.26
119	36	DR9	DRB1*09:02		19996.5
119	52	DR9	DRB1*09:02		17614.5
119	64	DR9	DRB1*09:02		18262.81
119	76	DR9	DRB1*09:02		16516
120	0	A2	A*02:06		19939.19
120	8	A2	A*02:06		19955.95
120	16	A2	A*02:06		20427.19
120	24	A2	A*02:06		15871.7

120	36	A2	A*02:06		16476.98
120	52	A2	A*02:06		12970.22
120	64	A2	A*02:06		17420
120	76	A2	A*02:06		20225
120	0	B13Bw4	B*13:02		21122.59
120	8	B13Bw4	B*13:02		20816.28
120	16	B13Bw4	B*13:02		21117.46
120	24	B13Bw4	B*13:02		20418.22
120	36	B13Bw4	B*13:02		18270.58
120	52	B13Bw4	B*13:02		17857.48
120	64	B13Bw4	B*13:02		19284
120	76	B13Bw4	B*13:02		19290
120	0	B27Bw4	B*27:05		20738.55
120	8	B27Bw4	B*27:05		20917.01
120	16	B27Bw4	B*27:05		21098.81
120	24	B27Bw4	B*27:05		19774.12
120	36	B27Bw4	B*27:05		17907.95
120	52	B27Bw4	B*27:05		18384.85
120	64	B27Bw4	B*27:05		19024
120	76	B27Bw4	B*27:05		19321
120	0	B27Bw6	B*27:08		20454.66
120	8	B27Bw6	B*27:08		20661.26
120	16	B27Bw6	B*27:08		21081.35
120	24	B27Bw6	B*27:08		19804.38
120	36	B27Bw6	B*27:08		18777.41
120	52	B27Bw6	B*27:08		17478.09
120	64	B27Bw6	B*27:08		19139
120	76	B27Bw6	B*27:08		19305
120	0	B57Bw4	B*57:01		20242.13
120	8	B57Bw4	B*57:01		20531.87
120	16	B57Bw4	B*57:01		20525.29
120	24	B57Bw4	B*57:01		17016.52
120	36	B57Bw4	B*57:01		17309.73
120	52	B57Bw4	B*57:01		14769.98
120	64	B57Bw4	B*57:01		18053
120	76	B57Bw4	B*57:01		19286
120	0	B58Bw4	B*58:01		20030.5
120	8	B58Bw4	B*58:01		20026.36
120	16	B58Bw4	B*58:01		20717.15
120	24	B58Bw4	B*58:01		19716.75
120	36	B58Bw4	B*58:01		18119.9
120	52	B58Bw4	B*58:01		18093.38
120	64	B58Bw4	B*58:01		18738
120	76	B58Bw4	B*58:01		19285
120	0	B60Bw6	B*40:01		20950.69
120	8	B60Bw6	B*40:01		20670.66
120	16	B60Bw6	B*40:01		21212.33

120	24	B60Bw6	B*40:01	I	18572.73
120	36	B60Bw6	B*40:01	I	17920.22
120	52	B60Bw6	B*40:01	I	15678.51
120	64	B60Bw6	B*40:01	I	18438
120	76	B60Bw6	B*40:01	I	19842
120	0	B61Bw6	B*40:06	I	20437.54
120	8	B61Bw6	B*40:06	I	20402.97
120	16	B61Bw6	B*40:06	I	20692.7
120	24	B61Bw6	B*40:06	I	19338.66
120	36	B61Bw6	B*40:06	I	18005.18
120	52	B61Bw6	B*40:06	I	17796.68
120	64	B61Bw6	B*40:06	I	18463
120	76	B61Bw6	B*40:06	I	19391
120	0	B7Bw6	B*07:02	I	20735.72
120	8	B7Bw6	B*07:02	I	21051.99
120	16	B7Bw6	B*07:02	I	20952.22
120	24	B7Bw6	B*07:02	I	18464.52
120	36	B7Bw6	B*07:02	I	18348.9
120	52	B7Bw6	B*07:02	I	15585.7
120	64	B7Bw6	B*07:02	I	17903
120	76	B7Bw6	B*07:02	I	18892
120	0	B81Bw6	B*81:01	I	19940.85
120	8	B81Bw6	B*81:01	I	19702.38
120	16	B81Bw6	B*81:01	I	20346.46
120	24	B81Bw6	B*81:01	I	16236.68
120	36	B81Bw6	B*81:01	I	16586.24
120	52	B81Bw6	B*81:01	I	13055.09
120	64	B81Bw6	B*81:01	I	17152
120	76	B81Bw6	B*81:01	I	18698
120	0	DP14	DPA1*02:01DPB1*14:01	II	11253.89
120	8	DP14	DPA1*02:01DPB1*14:01	II	9978.07
120	16	DP14	DPA1*02:01DPB1*14:01	II	10102.84
120	24	DP14	DPA1*02:01DPB1*14:01	II	9795.55
120	36	DP14	DPA1*02:01DPB1*14:01	II	10818.7
120	52	DP14	DPA1*02:01DPB1*14:01	II	8483.83
120	64	DP14	DPA1*02:01DPB1*14:01	II	8742
120	76	DP14	DPA1*02:01DPB1*14:01	II	9505
120	0	DP17	DPA1*02:01DPB1*17:01	II	12519.21
120	8	DP17	DPA1*02:01DPB1*17:01	II	10888.81
120	16	DP17	DPA1*02:01DPB1*17:01	II	11391.98
120	24	DP17	DPA1*02:01DPB1*17:01	II	10201.82
120	36	DP17	DPA1*02:01DPB1*17:01	II	11064.81
120	52	DP17	DPA1*02:01DPB1*17:01	II	8723.21
120	64	DP17	DPA1*02:01DPB1*17:01	II	9379
120	76	DP17	DPA1*02:01DPB1*17:01	II	10205
120	0	DP3	DPA1*01:03DPB1*03:01	II	13302.82
120	8	DP3	DPA1*01:03DPB1*03:01	II	11340.12

120	16	DP3	DPA1*01:03DPB1*03:01		11852.34
120	24	DP3	DPA1*01:03DPB1*03:01		11290.69
120	36	DP3	DPA1*01:03DPB1*03:01		11438.51
120	52	DP3	DPA1*01:03DPB1*03:01		8996.68
120	64	DP3	DPA1*01:03DPB1*03:01		9474
120	76	DP3	DPA1*01:03DPB1*03:01		10126
120	0	DP6	DPA1*02:01DPB1*06:01		11913.46
120	8	DP6	DPA1*02:01DPB1*06:01		10086.51
120	16	DP6	DPA1*02:01DPB1*06:01		10241.9
120	24	DP6	DPA1*02:01DPB1*06:01		9616.72
120	36	DP6	DPA1*02:01DPB1*06:01		10878.54
120	52	DP6	DPA1*02:01DPB1*06:01		8175.98
120	64	DP6	DPA1*02:01DPB1*06:01		8855
120	76	DP6	DPA1*02:01DPB1*06:01		9485
120	0	DP9	DPA1*02:01DPB1*09:01		14880.01
120	8	DP9	DPA1*02:01DPB1*09:01		12206.48
120	16	DP9	DPA1*02:01DPB1*09:01		12717.85
120	24	DP9	DPA1*02:01DPB1*09:01		12062.11
120	36	DP9	DPA1*02:01DPB1*09:01		12803.23
120	52	DP9	DPA1*02:01DPB1*09:01		10853.79
120	64	DP9	DPA1*02:01DPB1*09:01		10889
120	76	DP9	DPA1*02:01DPB1*09:01		11254
120	0	DR11	DRB1*11:04		9439.84
120	8	DR11	DRB1*11:04		7869.79
120	16	DR11	DRB1*11:04		8124.22
120	24	DR11	DRB1*11:04		7898.54
120	36	DR11	DRB1*11:04		9439.58
120	52	DR11	DRB1*11:04		7299.52
120	64	DR11	DRB1*11:04		7655
120	76	DR11	DRB1*11:04		8192
120	0	DR12	DRB1*12:01		2649.4
120	8	DR12	DRB1*12:01		1679.89
120	16	DR12	DRB1*12:01		1955.41
120	24	DR12	DRB1*12:01		1696.03
120	36	DR12	DRB1*12:01		2586.67
120	52	DR12	DRB1*12:01		1475.07
120	64	DR12	DRB1*12:01		1164
120	76	DR12	DRB1*12:01		1233
120	0	DR52	DRB3*01:01		7691.59
120	8	DR52	DRB3*01:01		6530.71
120	16	DR52	DRB3*01:01		6540.72
120	24	DR52	DRB3*01:01		5545.32
120	36	DR52	DRB3*01:01		7799.27
120	52	DR52	DRB3*01:01		4867.43
120	64	DR52	DRB3*01:01		4532
120	76	DR52	DRB3*01:01		4953
120	0	DR7	DRB1*07:01		7439.2

120	8	DR7	DRB1*07:01		5625.4
120	16	DR7	DRB1*07:01		5462.32
120	24	DR7	DRB1*07:01		4702.44
120	36	DR7	DRB1*07:01		5449.57
120	52	DR7	DRB1*07:01		3380.07
120	64	DR7	DRB1*07:01		3294
120	76	DR7	DRB1*07:01		3273
120	0	DR9	DRB1*09:01		5904.49
120	8	DR9	DRB1*09:01		4774.97
120	16	DR9	DRB1*09:01		4383.76
120	24	DR9	DRB1*09:01		3709.2
120	36	DR9	DRB1*09:01		5284.5
120	52	DR9	DRB1*09:01		2876.96
120	64	DR9	DRB1*09:01		2704
120	76	DR9	DRB1*09:01		2638
121	0	A2	A*02:06		11391.85
121	8	A2	A*02:06		13137.57
121	16	A2	A*02:06		15776.16
121	24	A2	A*02:06		14616.26
121	36	A2	A*02:06		19529.79
121	52	A2	A*02:06		13157.13
121	64	A2	A*02:06		16692.22
121	76	A2	A*02:06		12378
121	0	A23	A*23:01		4431.2
121	8	A23	A*23:01		3190.38
121	16	A23	A*23:01		3070.91
121	24	A23	A*23:01		3388.12
121	36	A23	A*23:01		2575.55
121	52	A23	A*23:01		4233.8
121	64	A23	A*23:01		2291.24
121	76	A23	A*23:01		3067
121	0	A24	A*24:03		13290.33
121	8	A24	A*24:03		11293.58
121	16	A24	A*24:03		11078.83
121	24	A24	A*24:03		11599.62
121	36	A24	A*24:03		9315.6
121	52	A24	A*24:03		13565.28
121	64	A24	A*24:03		9725.53
121	76	A24	A*24:03		11628
121	0	A36	A*36:01		6002.49
121	8	A36	A*36:01		5385.22
121	16	A36	A*36:01		5579.13
121	24	A36	A*36:01		5422.01
121	36	A36	A*36:01		4048.31
121	52	A36	A*36:01		6687.18
121	64	A36	A*36:01		3977.22
121	76	A36	A*36:01		5411

121	0	A68	A*68:02		13411.83
121	8	A68	A*68:02		15541.52
121	16	A68	A*68:02		17723.75
121	24	A68	A*68:02		15933.92
121	36	A68	A*68:02		20076.09
121	52	A68	A*68:02		15227.96
121	64	A68	A*68:02		18016.09
121	76	A68	A*68:02		14231
121	0	A69	A*69:01		14150.37
121	8	A69	A*69:01		14843.75
121	16	A69	A*69:01		18548.51
121	24	A69	A*69:01		16356.16
121	36	A69	A*69:01		20049.41
121	52	A69	A*69:01		16271.73
121	64	A69	A*69:01		18465.12
121	76	A69	A*69:01		14826
121	0	B45Bw6	B*45:01		3610.42
121	8	B45Bw6	B*45:01		2837.01
121	16	B45Bw6	B*45:01		3121.54
121	24	B45Bw6	B*45:01		3239.18
121	36	B45Bw6	B*45:01		2853.45
121	52	B45Bw6	B*45:01		3793.56
121	64	B45Bw6	B*45:01		2708.08
121	76	B45Bw6	B*45:01		3073
121	0	B57Bw4	B*57:01		14096.14
121	8	B57Bw4	B*57:01		13147.56
121	16	B57Bw4	B*57:01		12592.68
121	24	B57Bw4	B*57:01		13094.44
121	36	B57Bw4	B*57:01		11999.39
121	52	B57Bw4	B*57:01		14443.39
121	64	B57Bw4	B*57:01		11595.42
121	76	B57Bw4	B*57:01		13056
121	0	B58Bw4	B*58:01		11342.42
121	8	B58Bw4	B*58:01		9769.64
121	16	B58Bw4	B*58:01		10141.62
121	24	B58Bw4	B*58:01		9782.72
121	36	B58Bw4	B*58:01		9746.3
121	52	B58Bw4	B*58:01		11024.94
121	64	B58Bw4	B*58:01		8717.35
121	76	B58Bw4	B*58:01		9327
121	0	B76Bw6	B*15:12		4514.22
121	8	B76Bw6	B*15:12		3693.48
121	16	B76Bw6	B*15:12		4062.85
121	24	B76Bw6	B*15:12		4247.09
121	36	B76Bw6	B*15:12		4173.78
121	52	B76Bw6	B*15:12		4479.27
121	64	B76Bw6	B*15:12		3658.18

121	76	B76Bw6	B*15:12	I	3421
121	0	DQ4	DQA1*04:01DQB1*04:02	II	19825.9
121	8	DQ4	DQA1*04:01DQB1*04:02	II	19347.41
121	16	DQ4	DQA1*04:01DQB1*04:02	II	21400.49
121	24	DQ4	DQA1*04:01DQB1*04:02	II	19740.98
121	36	DQ4	DQA1*04:01DQB1*04:02	II	21352.97
121	52	DQ4	DQA1*04:01DQB1*04:02	II	19913.98
121	64	DQ4	DQA1*04:01DQB1*04:02	II	20412
121	76	DQ4	DQA1*04:01DQB1*04:02	II	19166
121	0	DQ5	DQA1*01:02DQB1*05:02	II	19501.01
121	8	DQ5	DQA1*01:02DQB1*05:02	II	19577.57
121	16	DQ5	DQA1*01:02DQB1*05:02	II	20766.67
121	24	DQ5	DQA1*01:02DQB1*05:02	II	19530.15
121	36	DQ5	DQA1*01:02DQB1*05:02	II	21366.53
121	52	DQ5	DQA1*01:02DQB1*05:02	II	19322.71
121	64	DQ5	DQA1*01:02DQB1*05:02	II	20075
121	76	DQ5	DQA1*01:02DQB1*05:02	II	18617
121	0	DQ6	DQA1*01:01DQB1*06:02	II	19164.33
121	8	DQ6	DQA1*01:01DQB1*06:02	II	18949.91
121	16	DQ6	DQA1*01:01DQB1*06:02	II	20398.57
121	24	DQ6	DQA1*01:01DQB1*06:02	II	19323.35
121	36	DQ6	DQA1*01:01DQB1*06:02	II	20376.89
121	52	DQ6	DQA1*01:01DQB1*06:02	II	19342.7
121	64	DQ6	DQA1*01:01DQB1*06:02	II	19862
121	76	DQ6	DQA1*01:01DQB1*06:02	II	18846
121	0	DQ7	DQA1*05:05DQB1*03:01	II	8856.42
121	8	DQ7	DQA1*05:05DQB1*03:01	II	6639.34
121	16	DQ7	DQA1*05:05DQB1*03:01	II	6883.26
121	24	DQ7	DQA1*05:05DQB1*03:01	II	5752.37
121	36	DQ7	DQA1*05:05DQB1*03:01	II	5747.46
121	52	DQ7	DQA1*05:05DQB1*03:01	II	6961.36
121	64	DQ7	DQA1*05:05DQB1*03:01	II	6395
121	76	DQ7	DQA1*05:05DQB1*03:01	II	5983
121	0	DQ8	DQA1*03:01DQB1*03:02	II	18259.12
121	8	DQ8	DQA1*03:01DQB1*03:02	II	18191.76
121	16	DQ8	DQA1*03:01DQB1*03:02	II	18843.7
121	24	DQ8	DQA1*03:01DQB1*03:02	II	17880.01
121	36	DQ8	DQA1*03:01DQB1*03:02	II	19077.55
121	52	DQ8	DQA1*03:01DQB1*03:02	II	17500.57
121	64	DQ8	DQA1*03:01DQB1*03:02	II	17453
121	76	DQ8	DQA1*03:01DQB1*03:02	II	16981
121	0	DQ9	DQA1*03:01DQB1*03:03	II	19025.38
121	8	DQ9	DQA1*03:01DQB1*03:03	II	18466.8
121	16	DQ9	DQA1*03:01DQB1*03:03	II	19297.05
121	24	DQ9	DQA1*03:01DQB1*03:03	II	18435.22
121	36	DQ9	DQA1*03:01DQB1*03:03	II	18708.84
121	52	DQ9	DQA1*03:01DQB1*03:03	II	18638.23

121	64	DQ9	DQA1*03:01DQB1*03:03	II	18757
121	76	DQ9	DQA1*03:01DQB1*03:03	II	17572