# Supporting Information

Supporting Texts

Text S1. The training sets of TripletRes and ResTriplet.

TripletRes and ResTriplet were trained on a subset of domain sequences from the SCOPe 2.07 database[1], which was collected using following filters: (1) Sequence length should be in the range of 30-400; (2) Resolution of the corresponding PDB structure should be better than 2.0 Å; (3) Maximum pairwise sequence identity is set to 30%. These resulted in 7,671 non-redundant domains that are used for training our pipelines.

Supporting Figures
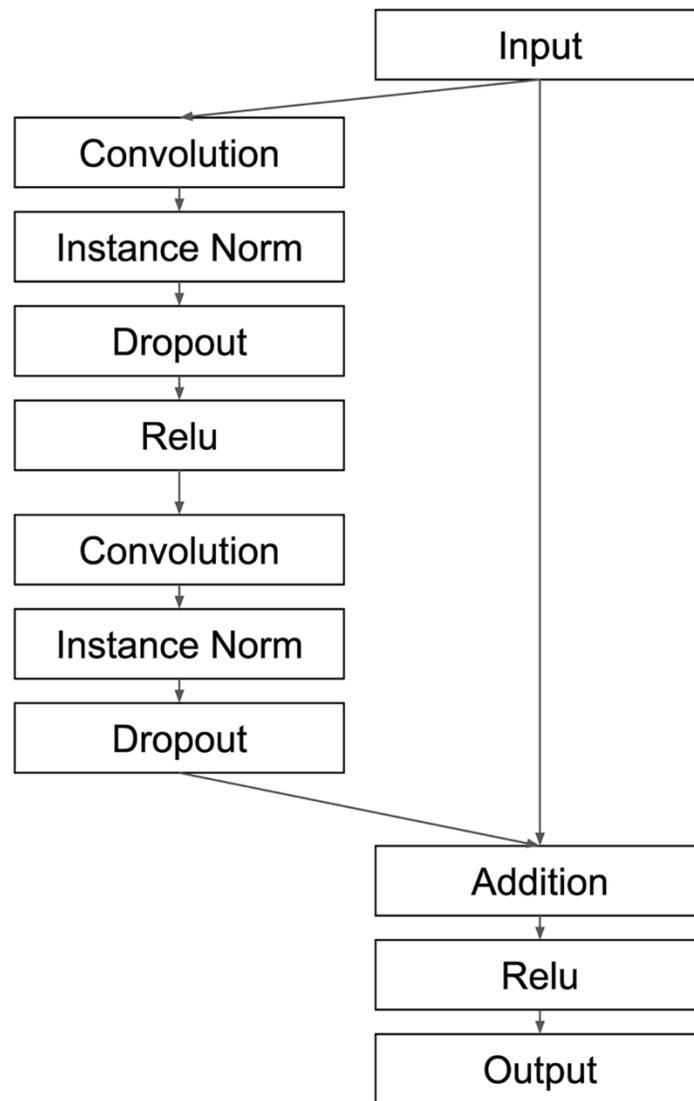
Figure S1. The architecture of a basic residual block.
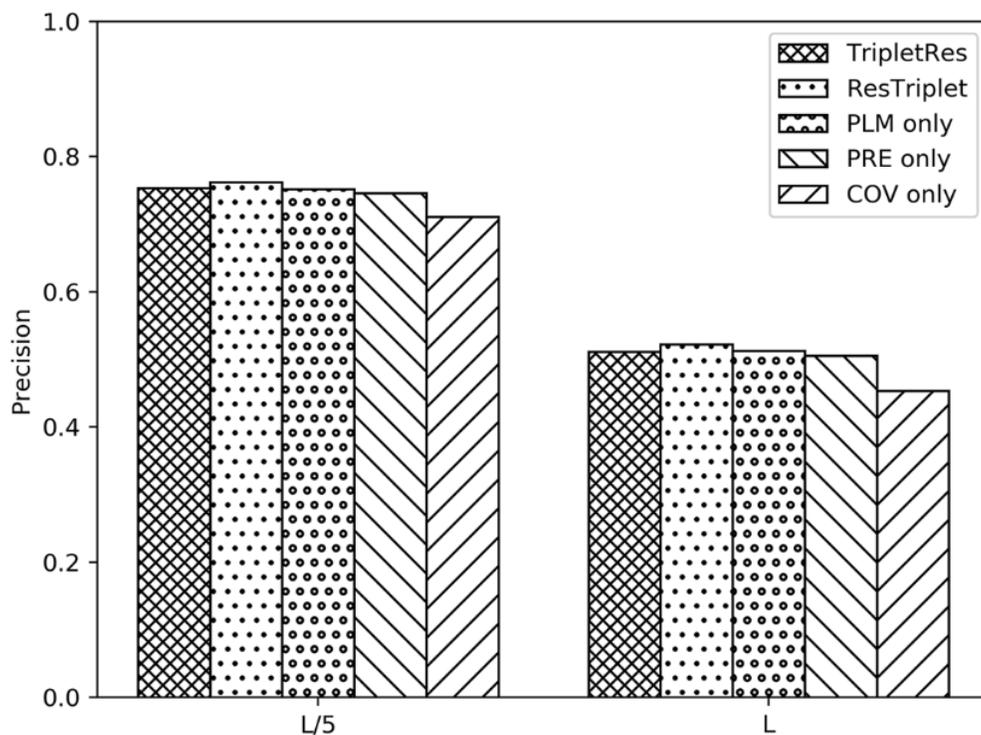
Figure S2. Mean precisions of long-range top L and top L/5 contacts of TripletRes and ResTriplet on all CASP13 targets, compared to the predictors trained on the component features from the covariance matrix feature (COV), the precision matrix feature (PRE) and the coupling matrix of the inverse Potts model feature (PLM).
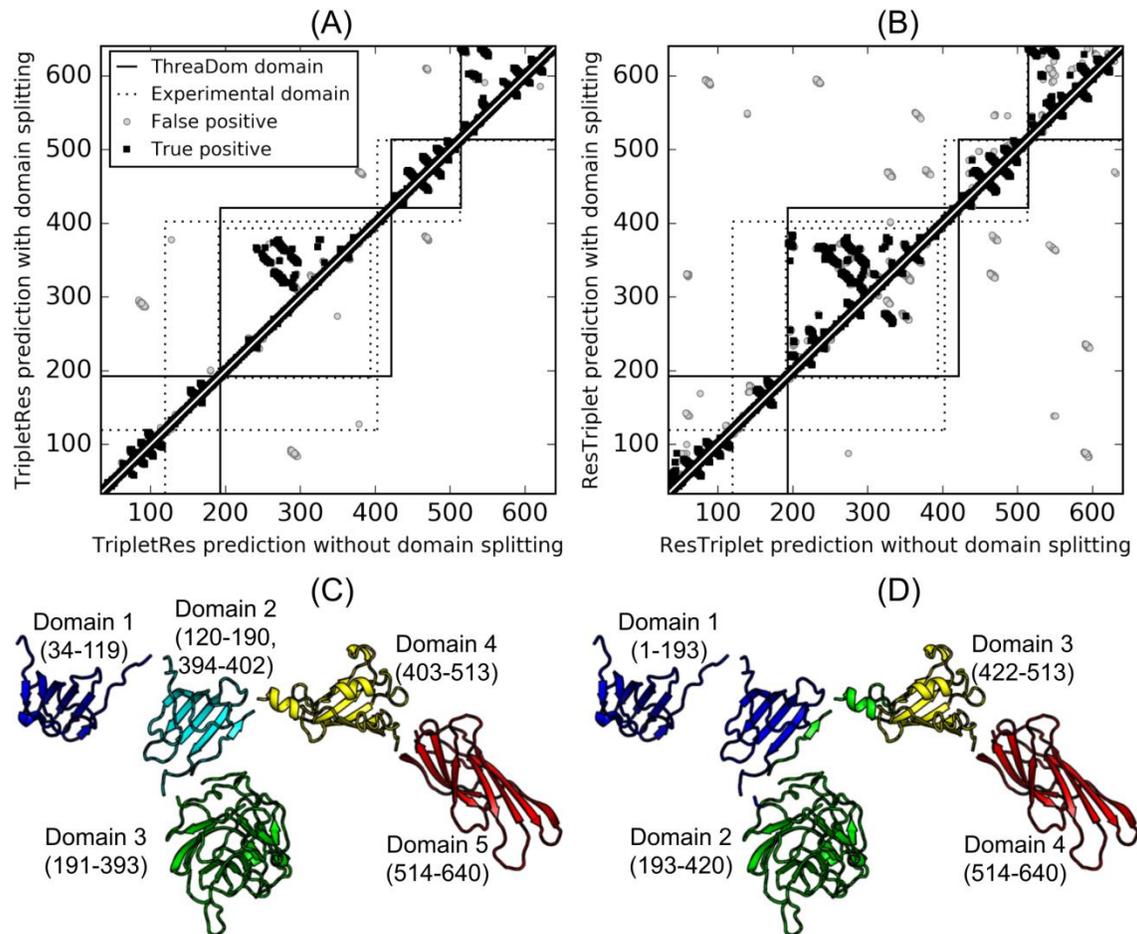
Figure S3. Domain partitioning and contact prediction results for T0981 in CASP13. **(A)** Contact prediction by TripletRes with domain partitioning versus those without domain partitioning. Grey and black dots are false and true positive predictions respectively, and solid and dotted lines mark the domain boundaries by ThreaDom and experimental assignments, respectively. **(B)** Same as **(A)** but for ResTriplet. **(C)** Domain partitioning from experimental structure. **(D)** Domain partitioning by ThreaDom prediction.

Supporting Tables

Table SI. Summary of contact-map predictions by ResTriplet and TripletRes on all 122 domains in CASP13.

Method	Target	Type*	Nf	Short			Medium			Long		
				L	L/2	L/5	L	L/2	L/5	L	L/2	L/5
	T0949-D1	FM/TBM	282.0	0.2014	0.3188	0.5926	0.3525	0.5797	0.9630	0.8705	1.0000	1.0000
	T0950-D1	FM	10.2	0.0585	0.0760	0.1765	0.1140	0.1988	0.4559	0.5088	0.7427	0.9412
	T0951-D1	TBM-easy	2104.7	0.3008	0.5038	0.7925	0.2556	0.4887	0.8679	0.8835	0.9624	1.0000
	T0953s1-D1	FM	17.6	0.6418	0.9394	1.0000	0.2985	0.5758	0.9231	0.0000	0.0000	0.0000
	T0953s2-D1	FM/TBM	102.6	0.0909	0.0000	0.0000	0.1136	0.1818	0.2500	0.2500	0.4091	0.5000
	T0953s2-D2	FM	64.6	0.1029	0.1961	0.4250	0.2108	0.3922	0.5500	0.7745	0.8725	0.9750
	T0953s2-D3	FM	70.6	0.6364	0.7895	0.9333	0.5455	0.6579	0.6667	0.6623	0.8421	0.8667
	T0954-D1	TBM-hard	1678.7	0.5322	0.7953	0.8824	0.6696	0.7895	0.8529	0.3743	0.5088	0.5441
	T0955-D1	FM/TBM	0.2	0.5610	0.9000	0.8750	0.5610	0.8000	1.0000	0.0976	0.2000	0.2500
	T0957s1-D1	FM	6.7	0.3148	0.6049	1.0000	0.3333	0.5926	0.9062	0.3025	0.4198	0.5938
	T0957s1-D2	TBM-hard	9.4	0.1296	0.2222	0.3000	0.1296	0.2593	0.7000	0.5185	0.7778	1.0000
	T0957s2-D1	FM	4.7	0.2129	0.3636	0.5484	0.2452	0.4545	0.6774	0.3419	0.4805	0.6129
	T0958-D1	FM/TBM	2.9	0.1948	0.3947	0.7333	0.2727	0.4474	0.6000	0.3636	0.3947	0.5333
	T0959-D1	TBM-hard	418.7	0.2116	0.3511	0.6757	0.3228	0.4894	0.6757	0.5714	0.7553	0.8108
	T0960-D1	NE	6.9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	T0960-D2	FM	4.3	0.2976	0.4048	0.6875	0.4286	0.5714	0.9375	0.0595	0.0714	0.1250
	T0960-D3	TBM-hard	4.1	0.3708	0.6818	1.0000	0.6292	0.8636	1.0000	0.2472	0.3864	0.7059
	T0960-D4	NE	4.9	0.1094	0.1562	0.3333	0.0156	0.0312	0.0833	0.0000	0.0000	0.0000
	T0960-D5	TBM-easy	7.6	0.3333	0.4423	0.7143	0.4000	0.5192	0.6667	0.8381	0.8846	0.9524
	T0961-D1	TBM-easy	514.1	0.2624	0.4622	0.7200	0.2803	0.5259	0.9100	0.8072	0.9124	0.9900
	T0962-D1	TBM-easy	225.1	0.4463	0.6477	0.9429	0.3785	0.5795	0.8286	0.6102	0.8864	0.9143
	T0963-D1	NE	38.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	T0963-D2	FM	23.4	0.4268	0.7317	0.9375	0.7683	0.9024	0.9375	0.1098	0.1951	0.3125
	T0963-D3	TBM-hard	22.0	0.3978	0.7174	1.0000	0.6882	0.8261	1.0000	0.2581	0.4348	0.7778
	T0963-D4	NE	244.6	0.2656	0.3125	0.4167	0.0469	0.0625	0.0000	0.0000	0.0000	0.0000
	T0963-D5	TBM-easy	201.8	0.2872	0.4894	0.5556	0.2660	0.3830	0.5556	0.7128	0.7872	0.8889
ResTriplet	T0964-D1	TBM-hard	56.6	0.5474	0.8511	1.0000	0.4421	0.7021	0.9474	0.8632	0.9787	0.9474
	T0965-D1	TBM-hard	2469.8	0.2236	0.4231	0.7258	0.3003	0.5513	0.9032	0.8594	0.9231	1.0000
	T0966-D1	TBM-hard	2.0	0.2398	0.4350	0.7755	0.2439	0.4431	0.8061	0.6362	0.8049	0.9388
	T0967-D1	TBM-easy	851.5	0.2405	0.4615	0.8667	0.5190	0.9231	1.0000	0.7215	0.8205	1.0000
	T0968s1-D1	FM	16.0	0.3644	0.6610	0.9565	0.5339	0.8814	1.0000	0.2881	0.3559	0.3913
	T0968s2-D1	FM	33.0	0.6435	0.9298	1.0000	0.7304	0.8070	0.9565	0.2957	0.3333	0.4783
	T0969-D1	FM	87.3	0.2090	0.3503	0.5286	0.2655	0.4407	0.7143	0.7401	0.8701	0.9571
	T0970-D1	FM/TBM	12.9	0.2990	0.4583	0.6316	0.4433	0.6667	0.8947	0.5876	0.8333	0.8947
	T0971-D1	TBM-easy	1280.0	0.4231	0.7231	0.9615	0.7231	0.9846	1.0000	0.7000	0.9538	1.0000
	T0973-D1	TBM-easy	40.7	0.2740	0.5342	0.8621	0.6164	0.8904	1.0000	0.4041	0.6301	0.9655
	T0974s1-D1	TBM-easy	4576.9	0.3043	0.5882	1.0000	0.1594	0.2647	0.6154	0.3768	0.6176	0.8462
	T0974s2-D1	NE	4174.0	0.3500	0.6000	0.8125	0.2375	0.4250	0.8125	0.3750	0.5750	0.8125
	T0975-D1	FM	387.2	0.2150	0.3699	0.7759	0.2150	0.4041	0.7241	0.4539	0.5890	0.7241
	T0976-D1	TBM-easy	2060.0	0.1750	0.3500	0.6667	0.3750	0.7167	0.9583	0.8917	1.0000	1.0000
	T0976-D2	TBM-easy	424.9	0.1935	0.3871	0.7917	0.3790	0.6935	1.0000	0.8629	0.9839	1.0000
	T0977-D1	TBM-easy	24.5	0.5017	0.8533	0.9833	0.7442	0.9533	0.9667	0.4419	0.5800	0.7500
	T0977-D2	TBM-easy	2.3	0.3627	0.6078	0.9500	0.6912	0.9020	0.9750	0.2304	0.3529	0.6500
	T0978-D1	FM/TBM	183.2	0.1671	0.2427	0.3049	0.2228	0.3495	0.5732	0.4843	0.7039	0.8659
	T0979-D1	TBM-hard	631.8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	T0980s1-D1	FM	7.6	0.2952	0.5000	0.7619	0.3524	0.5000	0.7143	0.3619	0.5192	0.9048
	T0980s2-D1	NE	6.0	0.1290	0.2667	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	T0981-D1	TBM-hard	14.1	0.4884	0.6279	0.7647	0.6628	0.6279	0.9412	0.1395	0.2326	0.2941
	T0981-D2	FM	0.6	0.0989	0.1773	0.3929	0.2544	0.3475	0.6071	0.0636	0.0638	0.0714
	T0981-D3	FM/TBM	242.8	0.1823	0.2871	0.4500	0.3547	0.4851	0.6000	0.8177	0.9208	1.0000
	T0981-D4	TBM-hard	0.5	0.4054	0.5455	0.5909	0.5946	0.8545	1.0000	0.2523	0.4182	0.9091
	T0981-D5	TBM-hard	2.8	0.4016	0.6349	0.9200	0.5276	0.7619	0.9200	0.6693	0.8095	0.9600
	T0982-D1	TBM-easy	204.8	0.5111	0.7910	0.9630	0.6889	0.8806	0.9630	0.6815	0.8806	0.9630

T0982-D2	TBM-hard	207.1	0.4091	0.6061	0.8846	0.4470	0.6818	0.9615	0.4242	0.4697	0.3846
T0983-D1	TBM-easy	644.8	0.3178	0.6017	1.0000	0.6695	0.9576	1.0000	0.8475	0.9746	1.0000
T0984-D1	TBM-easy	186.2	0.0982	0.1964	0.3333	0.1027	0.1511	0.2576	0.3384	0.5227	0.7576
T0984-D2	TBM-easy	344.7	0.0408	0.0822	0.2069	0.0680	0.1370	0.1724	0.3946	0.5205	0.7586
T0985-D1	TBM-hard	193.6	0.3610	0.5629	0.7976	0.3337	0.5083	0.7262	0.5914	0.6912	0.7321
T0986s1-D1	FM/TBM	52.2	0.5217	0.7174	1.0000	0.3696	0.6304	0.8333	0.3261	0.5000	0.7222
T0986s2-D1	FM	5.7	0.3226	0.4805	0.7419	0.3355	0.5974	0.8387	0.5613	0.7013	0.8710
T0987-D1	FM	3.5	0.2757	0.4891	0.7568	0.3135	0.5217	0.7027	0.7081	0.9348	1.0000
T0987-D2	FM	3.3	0.2029	0.3592	0.5122	0.2947	0.4563	0.7561	0.5459	0.7573	0.9024
T0989-D1	FM	1.7	0.2761	0.3582	0.6923	0.3507	0.5970	0.8462	0.2761	0.4478	0.8462
T0989-D2	FM	1.9	0.2589	0.4643	0.9091	0.3036	0.4464	0.7273	0.1339	0.1607	0.1818
T0990-D1	FM	4.0	0.1842	0.3421	0.6000	0.2895	0.3421	0.6667	0.3553	0.5263	0.6000
T0990-D2	FM	2.3	0.0946	0.1802	0.3864	0.1059	0.1712	0.3864	0.2005	0.3063	0.5227
T0990-D3	FM	2.4	0.2488	0.3774	0.5476	0.1502	0.2547	0.4048	0.2441	0.3679	0.6429
T0991-D1	FM	0.3	0.3136	0.4746	0.7391	0.4661	0.5763	0.8261	0.2881	0.4915	0.5652
T0992-D1	FM/TBM	179.4	0.5607	0.8868	1.0000	0.6168	0.8113	0.9048	0.7477	0.9245	1.0000
T0993s1-D1	TBM-easy	2441.1	0.3346	0.6183	1.0000	0.3612	0.6336	0.9231	0.8403	0.9618	1.0000
T0993s2-D1	TBM-easy	1548.8	0.1327	0.2653	0.2105	0.2551	0.2653	0.2632	0.7449	0.8980	1.0000
T0995-D1	TBM-easy	632.4	0.3231	0.5850	0.9138	0.3673	0.6190	0.8966	0.8435	0.9388	1.0000
T0996-D1	TBM-easy	362.5	0.2710	0.4717	0.9524	0.4019	0.7170	0.9524	0.7477	0.9623	1.0000
T0996-D2	TBM-easy	332.7	0.2520	0.5079	0.7600	0.3228	0.6190	0.9600	0.8189	0.9524	1.0000
T0996-D3	TBM-easy	375.0	0.2500	0.4400	0.8500	0.4500	0.7000	0.9000	0.6200	0.8800	1.0000
T0996-D4	TBM-easy	55.8	0.2857	0.5152	1.0000	0.3459	0.6212	1.0000	0.7519	0.9697	1.0000
T0996-D5	TBM-easy	216.3	0.2645	0.5000	0.8333	0.3719	0.6500	0.9583	0.6364	0.8500	0.8333
T0996-D6	TBM-easy	233.3	0.3365	0.5769	0.9500	0.4423	0.8269	0.9500	0.7404	0.9423	1.0000
T0996-D7	TBM-easy	201.1	0.2429	0.4571	0.8214	0.3214	0.6000	0.9286	0.8000	0.9571	1.0000
T0997-D1	FM/TBM	172.5	0.3730	0.5543	0.7568	0.5784	0.8587	0.8919	0.7351	0.8587	0.9459
T0998-D1	FM	0.7	0.2470	0.3735	0.4545	0.3795	0.5904	0.6970	0.1867	0.1807	0.0909
T0999-D1	NE	11.1	0.2306	0.4041	0.6234	0.2073	0.3212	0.5584	0.6036	0.7979	0.9870
T0999-D2	TBM-hard	10.3	0.2914	0.5664	0.9333	0.3819	0.6504	0.8778	0.8565	0.9071	0.9000
T0999-D3	TMB-easy	16.3	0.1667	0.3333	0.6667	0.1278	0.2333	0.3889	0.6778	0.8444	0.9444
T0999-D4	TBM-easy	321.3	0.2623	0.4262	0.6875	0.3402	0.5492	0.7708	0.8074	0.9180	0.9792
T0999-D5	TBM-easy	295.7	0.2222	0.3889	0.7895	0.4271	0.7222	1.0000	0.8715	0.9861	1.0000
T1000-D1	NE	297.0	0.3855	0.7805	0.9375	0.6506	0.9268	0.9375	0.8554	0.9512	1.0000
T1000-D2	FM	186.7	0.1740	0.3349	0.6628	0.3109	0.6000	0.8953	0.8329	0.9116	0.9651
T1001-D1	FM	2.0	0.3309	0.5362	0.7407	0.4676	0.5942	0.7778	0.2158	0.2754	0.0741
T1002-D1	TBM-easy	410.7	0.5593	1.0000	1.0000	0.6441	0.8966	1.0000	0.7627	0.7586	0.7273
T1002-D2	TBM-easy	410.7	0.6102	1.0000	1.0000	0.6441	0.8276	1.0000	0.6271	0.8276	1.0000
T1002-D3	TBM-easy	262.9	0.4306	0.7361	1.0000	0.4653	0.7639	0.9643	0.8611	0.9861	1.0000
T1003-D1	TBM-easy	1508.2	0.3272	0.5046	0.8506	0.2609	0.4541	0.7701	0.7849	0.9725	0.9770
T1004-D1	TBM-easy	35.2	0.4186	0.7674	1.0000	0.8721	1.0000	1.0000	0.3023	0.4419	0.7647
T1004-D2	TBM-easy	37.2	0.4805	0.8158	1.0000	0.7403	0.8947	1.0000	0.1429	0.2632	0.4667
T1004-D3	NE	3.0	0.3348	0.4696	0.7174	0.4870	0.5913	0.8478	0.2609	0.4174	0.6739
T1005-D1	FM/TBM	261.6	0.1810	0.2577	0.3692	0.1656	0.2454	0.5231	0.6810	0.9080	0.9538
T1006-D1	TBM-easy	897.9	0.2468	0.5000	0.9333	0.5844	0.9474	1.0000	0.8831	0.9737	1.0000
T1008-D1	FM/TBM	0.1	0.3506	0.5000	0.6000	0.1948	0.2895	0.2000	0.3896	0.5263	0.6000
T1009-D1	TBM-hard	262.9	0.3691	0.5822	0.8462	0.2841	0.4958	0.7902	0.7981	0.9220	0.9510
T1010-D1	FM	20.4	0.2667	0.4190	0.7381	0.4476	0.6190	0.8810	0.5238	0.6571	0.8095
T1011-D1	TBM-hard	227.9	0.0558	0.1116	0.2258	0.0515	0.1030	0.2258	0.4893	0.7253	0.9247
T1011-D2	NE	144.9	0.3500	0.5875	0.9688	0.3063	0.5000	0.7812	0.5312	0.7125	0.9062
T1013-D1	TBM-easy	316.0	0.0846	0.1653	0.3936	0.0825	0.1653	0.4043	0.5159	0.7500	0.8617
T1014-D1	TBM-easy	1007.0	0.2453	0.4937	0.8710	0.4088	0.7089	0.9032	0.8616	0.9494	1.0000
T1014-D2	TBM-easy	4383.8	0.2821	0.4483	0.6957	0.5128	0.6724	0.6957	0.5897	0.7069	0.9130
T1015s1-D1	FM	43.9	0.4318	0.7955	1.0000	0.2841	0.5000	0.8824	0.5341	0.8636	0.9412
T1015s2-D1	TBM-hard	62.8	0.3178	0.5625	0.8400	0.3798	0.6875	0.9600	0.6667	0.8281	0.9600
T1016-D1	TBM-easy	1340.9	0.2574	0.5050	0.8500	0.4257	0.7525	0.9500	0.8762	0.9703	0.9500
T1017s1-D1	TBM-easy	25.5	0.2000	0.3818	0.5909	0.2545	0.4364	0.7727	0.4727	0.6182	1.0000
T1017s2-D1	FM	14.7	0.4219	0.6250	0.9600	0.5859	0.8438	1.0000	0.2812	0.4062	0.6800
T1018-D1	TBM-easy	386.9	0.2455	0.4371	0.7121	0.3353	0.6228	0.8182	0.8443	0.9341	0.9848
T1019s1-D1	FM/TBM	254.7	0.7759	0.9655	1.0000	0.5862	0.6897	0.8182	0.2586	0.3793	0.7273
T1019s2-D1	TBM-easy	129.0	0.4545	0.7727	1.0000	0.6250	0.9091	1.0000	0.3523	0.5682	0.7647
T1020-D1	TBM-easy	119.8	0.1087	0.2050	0.4688	0.1863	0.3540	0.7188	0.7640	0.9255	0.9375
T1021s1-D1	TBM-hard	154.3	0.2483	0.5000	0.7931	0.4161	0.8108	0.9655	0.6309	0.8243	1.0000

	T1021s2-D1	TBM-hard	149.2	0.2292	0.4138	0.7246	0.2808	0.4770	0.7246	0.7049	0.7644	0.7246
	T1021s3-D1	FM	330.0	0.1685	0.2472	0.4286	0.2360	0.4270	0.7714	0.7079	0.8652	1.0000
	T1021s3-D2	FM	4.7	0.2277	0.3800	0.7000	0.2871	0.4000	0.6500	0.2871	0.3000	0.2500
	T1022s1-D1	FM	436.0	0.2821	0.5385	0.7419	0.5064	0.8205	0.9677	0.6923	0.8846	0.9355
	T1022s1-D2	TBM-hard	486.3	0.0896	0.1515	0.3846	0.3731	0.6667	0.9231	0.5373	0.8485	0.8462
	T1022s2-D1	TBM-hard	132.5	0.3124	0.5344	0.7333	0.4419	0.7366	0.9810	0.5981	0.7939	0.9238
	Average			0.2939	0.4865	0.7170	0.3745	0.5662	0.7625	0.5225	0.6573	0.7621
TripletRes	T0949-D1	FM/TBM	282.0	0.1727	0.2754	0.5926	0.3309	0.5217	1.0000	0.8849	1.0000	1.0000
	T0950-D1	FM	10.2	0.0556	0.0760	0.1765	0.1140	0.1988	0.4559	0.4942	0.6725	0.8676
	T0951-D1	TBM-easy	2104.7	0.3120	0.4962	0.7736	0.2594	0.4887	0.8491	0.8647	0.9474	0.9811
	T0953s1-D1	FM	17.6	0.6418	0.9394	1.0000	0.2687	0.4545	0.7692	0.0000	0.0000	0.0000
	T0953s2-D1	FM/TBM	102.6	0.0227	0.0000	0.0000	0.1136	0.1818	0.2500	0.2273	0.2727	0.6250
	T0953s2-D2	FM	64.6	0.1029	0.1961	0.4000	0.2108	0.3333	0.5750	0.7892	0.8922	0.9750
	T0953s2-D3	FM	70.6	0.6234	0.7632	0.8667	0.5974	0.6316	0.7333	0.7013	0.8684	0.9333
	T0954-D1	TBM-hard	1678.7	0.5234	0.7661	0.9412	0.6608	0.7953	0.8382	0.3626	0.4737	0.4706
	T0955-D1	FM/TBM	0.2	0.5610	0.8500	0.8750	0.5854	0.9000	0.8750	0.0976	0.1500	0.3750
	T0957s1-D1	FM	6.7	0.3148	0.5802	0.9688	0.3333	0.5185	0.7812	0.2840	0.3580	0.6250
	T0957s1-D2	TBM-hard	9.4	0.1111	0.2222	0.1000	0.1296	0.2593	0.7000	0.5000	0.7407	1.0000
	T0957s2-D1	FM	4.7	0.2129	0.3896	0.5484	0.2452	0.4545	0.7742	0.3935	0.4935	0.5806
	T0958-D1	FM/TBM	2.9	0.1948	0.3947	0.6667	0.2468	0.4211	0.6000	0.3247	0.4737	0.8000
	T0959-D1	TBM-hard	418.7	0.2063	0.3617	0.5405	0.3280	0.4362	0.6486	0.5926	0.7660	0.8649
	T0960-D1	NE	6.9	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	T0960-D2	FM	4.3	0.3810	0.5000	0.7500	0.5952	0.7619	0.8750	0.0476	0.0714	0.1875
	T0960-D3	TBM-hard	4.1	0.3820	0.7045	1.0000	0.6517	0.8409	1.0000	0.1798	0.3409	0.7059
	T0960-D4	NE	4.9	0.1250	0.1562	0.1667	0.0312	0.0312	0.0000	0.0000	0.0000	0.0000
	T0960-D5	TBM-easy	7.6	0.3238	0.5192	0.6667	0.3810	0.5385	0.7143	0.7524	0.8269	0.9524
	T0961-D1	TBM-easy	514.1	0.2644	0.4701	0.7900	0.2803	0.5299	0.9000	0.7873	0.8884	0.9500
	T0962-D1	TBM-easy	225.1	0.4011	0.7045	0.9714	0.3616	0.5795	0.8571	0.6271	0.8182	0.9429
	T0963-D1	NE	38.1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	T0963-D2	FM	23.4	0.4390	0.7561	1.0000	0.8293	0.9268	1.0000	0.2439	0.3659	0.6875
	T0963-D3	TBM-hard	22.0	0.3763	0.6739	1.0000	0.7419	0.9130	0.9444	0.2903	0.5217	0.7778
	T0963-D4	NE	244.6	0.2656	0.3438	0.5000	0.0625	0.0938	0.1667	0.0000	0.0000	0.0000
	T0963-D5	TBM-easy	201.8	0.2979	0.4468	0.6111	0.2447	0.3617	0.6111	0.6915	0.7660	0.8333
	T0964-D1	TBM-hard	56.6	0.2421	0.3404	0.5263	0.1579	0.1915	0.2105	0.2316	0.3404	0.4737
	T0965-D1	TBM-hard	2469.8	0.2204	0.4038	0.6774	0.3035	0.5641	0.9355	0.8275	0.8974	0.9677
	T0966-D1	TBM-hard	2.0	0.2317	0.3699	0.5510	0.2012	0.3130	0.5408	0.4309	0.6667	0.8367
	T0967-D1	TBM-easy	851.5	0.2405	0.4615	0.8667	0.5190	0.8974	1.0000	0.7215	0.8205	0.9333
	T0968s1-D1	FM	16.0	0.3559	0.6441	0.9565	0.5254	0.8644	1.0000	0.3136	0.3898	0.5217
	T0968s2-D1	FM	33.0	0.6435	0.9123	1.0000	0.7043	0.8596	0.8696	0.3304	0.2982	0.2174
	T0969-D1	FM	87.3	0.2119	0.3729	0.6000	0.2571	0.4237	0.6857	0.7288	0.8927	0.9857
	T0970-D1	FM/TBM	12.9	0.3093	0.4375	0.5789	0.4124	0.6458	0.9474	0.5567	0.7708	0.8421
	T0971-D1	TBM-easy	1280.0	0.4154	0.7538	1.0000	0.7077	0.9692	0.9615	0.7154	0.9231	0.9231
	T0973-D1	TBM-easy	40.7	0.2740	0.5068	0.8621	0.6233	0.8493	0.9655	0.4110	0.6301	0.8621
	T0974s1-D1	TBM-easy	4576.9	0.3043	0.5882	0.9231	0.1594	0.3235	0.6154	0.4058	0.6176	0.9231
	T0974s2-D1	NE	4174.0	0.3500	0.6250	0.8125	0.2250	0.4500	0.7500	0.3750	0.5500	0.7500
	T0975-D1	FM	387.2	0.2423	0.4384	0.7759	0.1980	0.3767	0.7586	0.6007	0.8082	0.8448
	T0976-D1	TBM-easy	2060.0	0.1750	0.3500	0.6667	0.3750	0.7167	1.0000	0.8917	1.0000	1.0000
	T0976-D2	TBM-easy	424.9	0.1935	0.3871	0.7083	0.3790	0.6935	1.0000	0.8710	1.0000	1.0000
	T0977-D1	TBM-easy	24.5	0.4917	0.8467	0.9833	0.7342	0.9533	1.0000	0.4518	0.6533	0.7667
	T0977-D2	TBM-easy	2.3	0.3431	0.5882	0.9000	0.7059	0.9118	0.9250	0.2549	0.4020	0.6500
	T0978-D1	FM/TBM	183.2	0.1768	0.2961	0.4268	0.2252	0.3204	0.5854	0.5206	0.7233	0.8415
	T0979-D1	TBM-hard	631.8	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	T0980s1-D1	FM	7.6	0.2952	0.5577	0.7143	0.3810	0.5577	0.6190	0.3238	0.5192	0.9524
	T0980s2-D1	NE	6.0	0.1290	0.1333	0.3333	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	T0981-D1	TBM-hard	14.1	0.5116	0.7907	0.8235	0.5698	0.7209	1.0000	0.1163	0.1163	0.1176
	T0981-D2	FM	0.6	0.0989	0.1560	0.3393	0.2332	0.3262	0.5000	0.0742	0.0993	0.1429
	T0981-D3	FM/TBM	242.8	0.1429	0.2079	0.2750	0.1773	0.1881	0.0750	0.6749	0.9208	1.0000
	T0981-D4	TBM-hard	0.5	0.3694	0.5455	0.9091	0.6577	0.7818	1.0000	0.2793	0.4000	0.7727
	T0981-D5	TBM-hard	2.8	0.3622	0.5238	0.7600	0.5433	0.6190	0.7600	0.8031	0.9683	1.0000
	T0982-D1	TBM-easy	204.8	0.5037	0.8060	1.0000	0.6370	0.8806	0.9630	0.6741	0.8955	1.0000
	T0982-D2	TBM-hard	207.1	0.3939	0.5909	0.8077	0.4318	0.6667	0.9615	0.4697	0.4242	0.4615
	T0983-D1	TBM-easy	644.8	0.3220	0.6017	1.0000	0.6483	0.9492	1.0000	0.8475	0.9576	1.0000
	T0984-D1	TBM-easy	186.2	0.1012	0.1964	0.3636	0.0967	0.1631	0.3030	0.3414	0.5529	0.7803

T0984-D2	TBM-easy	344.7	0.0408	0.0822	0.2069	0.0680	0.1370	0.2069	0.4218	0.5342	0.6897
T0985-D1	TBM-hard	193.6	0.3361	0.5558	0.8690	0.3076	0.4893	0.7381	0.4323	0.5772	0.7262
T0986s1-D1	FM/TBM	52.2	0.5543	0.8043	0.9444	0.3913	0.6739	0.8333	0.3261	0.5217	0.7778
T0986s2-D1	FM	5.7	0.3419	0.5195	0.8387	0.3419	0.5714	0.8387	0.5032	0.6623	0.8387
T0987-D1	FM	3.5	0.2595	0.4783	0.8378	0.2865	0.4457	0.7027	0.7081	0.8804	0.9189
T0987-D2	FM	3.3	0.2029	0.2913	0.4390	0.2609	0.4563	0.7073	0.4928	0.7670	0.8293
T0989-D1	FM	1.7	0.2985	0.3731	0.6538	0.3284	0.5970	0.9231	0.2537	0.4328	0.8462
T0989-D2	FM	1.9	0.2679	0.4107	0.6818	0.3125	0.5000	0.7727	0.1339	0.2143	0.2273
T0990-D1	FM	4.0	0.2105	0.4211	0.6667	0.3026	0.4211	0.6000	0.3684	0.4737	0.5333
T0990-D2	FM	2.3	0.0946	0.1712	0.3750	0.1059	0.1802	0.4205	0.1937	0.2748	0.4091
T0990-D3	FM	2.4	0.2582	0.3491	0.5476	0.1549	0.2453	0.3095	0.2864	0.4245	0.6190
T0991-D1	FM	0.3	0.2966	0.4237	0.5217	0.3983	0.5254	0.6957	0.1525	0.1525	0.1304
T0992-D1	FM/TBM	179.4	0.5607	0.9245	1.0000	0.6355	0.8491	0.9524	0.7383	0.9057	1.0000
T0993s1-D1	TBM-easy	2441.1	0.3384	0.6107	1.0000	0.3574	0.6183	0.9231	0.8365	0.9542	0.9808
T0993s2-D1	TBM-easy	1548.8	0.1429	0.2245	0.1579	0.2449	0.2041	0.2632	0.7347	0.8571	1.0000
T0995-D1	TBM-easy	632.4	0.3197	0.5918	0.8966	0.3707	0.6190	0.9138	0.8367	0.9660	0.9828
T0996-D1	TBM-easy	362.5	0.2617	0.4906	0.9048	0.4019	0.7358	1.0000	0.7290	0.9245	1.0000
T0996-D2	TBM-easy	332.7	0.2520	0.4921	0.8400	0.3307	0.6508	0.9200	0.8110	0.9841	1.0000
T0996-D3	TBM-easy	375.0	0.2500	0.4400	0.8500	0.4500	0.7800	0.9000	0.7000	0.8800	1.0000
T0996-D4	TBM-easy	55.8	0.2857	0.5000	0.9231	0.3383	0.5758	1.0000	0.7820	0.9091	1.0000
T0996-D5	TBM-easy	216.3	0.2645	0.5000	0.9167	0.3636	0.6500	0.9167	0.6364	0.8000	0.8750
T0996-D6	TBM-easy	233.3	0.3365	0.5962	0.9500	0.4519	0.7500	1.0000	0.7885	0.9231	1.0000
T0996-D7	TBM-easy	201.1	0.2429	0.4429	0.7500	0.3071	0.5857	1.0000	0.7571	0.9429	1.0000
T0997-D1	FM/TBM	172.5	0.3514	0.5543	0.8649	0.5838	0.7935	0.8919	0.7135	0.8478	0.9459
T0998-D1	FM	0.7	0.2289	0.4217	0.6061	0.3916	0.5904	0.8182	0.1988	0.2048	0.0909
T0999-D1	NE	11.1	0.2642	0.4767	0.7922	0.2746	0.5026	0.8052	0.8549	0.9845	1.0000
T0999-D2	TBM-hard	10.3	0.2804	0.5354	0.9333	0.3620	0.6150	0.8667	0.8499	0.9381	0.9667
T0999-D3	TMB-easy	16.3	0.1667	0.2778	0.5000	0.1000	0.1778	0.2778	0.4444	0.4778	0.5833
T0999-D4	TBM-easy	321.3	0.2623	0.4508	0.7500	0.3320	0.5656	0.8958	0.7992	0.9344	1.0000
T0999-D5	TBM-easy	295.7	0.2222	0.4236	0.8070	0.4306	0.7569	0.9825	0.8611	0.9792	1.0000
T1000-D1	NE	297.0	0.3855	0.7561	1.0000	0.6747	0.9512	1.0000	0.8554	0.9756	1.0000
T1000-D2	FM	186.7	0.1717	0.3302	0.6395	0.3132	0.5860	0.8721	0.7935	0.9209	0.9651
T1001-D1	FM	2.0	0.3309	0.5507	0.7407	0.4317	0.6087	0.8148	0.2590	0.3478	0.2593
T1002-D1	TBM-easy	410.7	0.5763	1.0000	1.0000	0.6610	0.8966	1.0000	0.7288	0.7241	0.7273
T1002-D2	TBM-easy	410.7	0.6271	1.0000	1.0000	0.6102	0.8966	1.0000	0.5424	0.7931	1.0000
T1002-D3	TBM-easy	262.9	0.4236	0.7361	1.0000	0.4861	0.8194	1.0000	0.8681	0.9861	1.0000
T1003-D1	TBM-easy	1508.2	0.3204	0.4725	0.7701	0.2563	0.4358	0.7011	0.7437	0.9450	0.9770
T1004-D1	TBM-easy	35.2	0.4186	0.7442	1.0000	0.8256	1.0000	1.0000	0.3256	0.4419	0.7059
T1004-D2	TBM-easy	37.2	0.4805	0.8421	1.0000	0.8442	0.9211	1.0000	0.1688	0.2895	0.6000
T1004-D3	NE	3.0	0.2609	0.3826	0.5435	0.4130	0.5130	0.8043	0.1609	0.1739	0.1522
T1005-D1	FM/TBM	261.6	0.1779	0.2638	0.3846	0.1534	0.2577	0.5077	0.6687	0.8712	0.9385
T1006-D1	TBM-easy	897.9	0.2468	0.5000	0.9333	0.5714	0.9474	1.0000	0.8701	0.9737	1.0000
T1008-D1	FM/TBM	0.1	0.3506	0.5263	0.8000	0.2078	0.3158	0.4000	0.3506	0.5526	0.5333
T1009-D1	TBM-hard	262.9	0.3705	0.5794	0.8322	0.2813	0.5125	0.8112	0.8008	0.9164	0.9860
T1010-D1	FM	20.4	0.2381	0.3905	0.5952	0.4143	0.6381	0.8095	0.5333	0.6762	0.7619
T1011-D1	TBM-hard	227.9	0.0558	0.1116	0.1935	0.0515	0.1030	0.2151	0.5193	0.7511	0.9462
T1011-D2	NE	144.9	0.3750	0.6125	0.9688	0.3125	0.5125	0.7188	0.5250	0.7500	0.9375
T1013-D1	TBM-easy	316.0	0.0846	0.1653	0.3617	0.0825	0.1653	0.4043	0.5137	0.7458	0.8723
T1014-D1	TBM-easy	1007.0	0.2453	0.4810	0.8387	0.3962	0.7089	0.8710	0.8428	0.9620	1.0000
T1014-D2	TBM-easy	4383.8	0.2735	0.4310	0.7391	0.5214	0.6379	0.8261	0.5897	0.7069	0.8261
T1015s1-D1	FM	43.9	0.4318	0.7955	1.0000	0.2614	0.5000	0.8235	0.5114	0.8409	1.0000
T1015s2-D1	TBM-hard	62.8	0.3178	0.5781	0.8800	0.3798	0.7188	0.9200	0.5891	0.8438	0.9600
T1016-D1	TBM-easy	1340.9	0.2624	0.5050	0.8750	0.4307	0.7228	1.0000	0.8564	0.9703	1.0000
T1017s1-D1	TBM-easy	25.5	0.2000	0.3636	0.6364	0.2545	0.4545	0.8182	0.4545	0.6909	0.9545
T1017s2-D1	FM	14.7	0.4297	0.6094	0.8400	0.5781	0.9062	1.0000	0.3203	0.4375	0.7200
T1018-D1	TBM-easy	386.9	0.2395	0.4431	0.7273	0.3443	0.6168	0.8182	0.8473	0.9521	0.9848
T1019s1-D1	FM/TBM	254.7	0.7241	0.8621	1.0000	0.4310	0.5517	0.9091	0.2069	0.3793	0.7273
T1019s2-D1	TBM-easy	129.0	0.4545	0.7727	1.0000	0.6250	0.9318	1.0000	0.3409	0.5227	0.7647
T1020-D1	TBM-easy	119.8	0.1056	0.2050	0.3750	0.1832	0.3602	0.7344	0.7547	0.9006	0.9844
T1021s1-D1	TBM-hard	154.3	0.2483	0.4865	0.8621	0.4161	0.8108	1.0000	0.6644	0.8514	0.9655
T1021s2-D1	TBM-hard	149.2	0.2350	0.4195	0.6812	0.2837	0.4598	0.7681	0.6447	0.7529	0.8696
T1021s3-D1	FM	330.0	0.1404	0.2360	0.4286	0.2191	0.4045	0.7714	0.6461	0.8427	0.8857
T1021s3-D2	FM	4.7	0.2178	0.4200	0.5500	0.3267	0.5400	0.6000	0.3960	0.5000	0.6000

T1022s1-D1	FM	436.0	0.2756	0.5128	0.7419	0.5064	0.8333	0.9677	0.6090	0.7692	0.8710
T1022s1-D2	TBM-hard	486.3	0.1343	0.1515	0.3846	0.3582	0.6667	0.7692	0.5224	0.8485	0.8462
T1022s2-D1	TBM-hard	132.5	0.3181	0.5725	0.8952	0.4514	0.7710	0.9619	0.6552	0.8626	0.9619
Average			0.2894	0.4808	0.7073	0.3683	0.5597	0.7504	0.5115	0.6454	0.7538

* Target type as defined by CASP13 assessors (http://predictioncenter.org/casp13/domains_summary.cgi). NE stands for "not evaluated". "FM/TBM", "TBM-easy", "TBM-hard" are all considered as TBM by this manuscript.

Reference

1. Fox NK, Brenner SE, Chandonia J-M. SCOPe: Structural Classification of Proteins—extended, integrating SCOP and ASTRAL data and classification of new structures. Nucleic acids research 2013;42(D1):D304-D309.