

Gene*	Gene Location (Hg18)	CNV Location	Gene Relationship to CNV	Non-2-copy frequency (1211 subjects)	Tagged by SNP (R2)
ACP1	chr2:254868-268282	chr2:286130-287546	CNV within 50kb of gene; no overlap	31	
C3AR1	chr12:8102185-8110222	chr12:8136540-8141628	CNV within 50kb of gene; no overlap	31	
C5	chr9:122754434-122852375	chr9:122688017-122882816	CNV contains gene	29	
CARD11	chr7:2912235-3050035	chr7:2931873-2932413	CNV overlaps intron(s)	54	
CCL24	chr7:75279049-75280969	chr7:75318285-75347088	CNV within 50kb of gene; no overlap	19	
CCL26	chr7:75236777-75257000	chr7:75191996-75205991	CNV within 50kb of gene; no overlap	76	
CD28	chr2:204279442-204311880	chr2:204337204-204338497	CNV within 50kb of gene; no overlap	79	
DAP3	chr1:153925505-153975424	chr1:153926378-153931106	CNV overlaps intron(s)	64	
DPP10	chr2:114916368-116318796	chr2:115252785-115258540	CNV overlaps intron(s)	16	
DPP10	chr2:114916368-116318796	chr2:115344490-115345542	CNV overlaps intron(s)	539	
DPP10	chr2:114916368-116318796	chr2:116217719-116219847	CNV overlaps intron(s)	55	
EDNRB	chr13:77367616-77447665	chr13:77466845-77468238	CNV within 50kb of gene; no overlap	28	
EGR1	chr5:137829079-137832903	chr5:137816413-137818277	CNV within 50kb of gene; no overlap	85	
EGR1	chr5:137829079-137832903	chr5:137835616-137844524	CNV within 50kb of gene; no overlap	46	
EPHX1	chr1:224064419-224099885	chr1:224043565-224044791	CNV within 50kb of gene; no overlap	7	
EPHX1	chr1:224064419-224099885	chr1:224056512-224057777	CNV within 50kb of gene; no overlap	24	
EPHX1	chr1:224064419-224099885	chr1:224141033-224143640	CNV within 50kb of gene; no overlap	11	
ESR1	chr6:152053323-152466101	chr6:152431681-152433972	CNV overlaps intron(s)	224	rs3778082(.84)
ESR1	chr6:152053323-152466101	chr6:152432919-152433903	CNV overlaps intron(s)	266	
FCGR2A	chr1:159741828-159755984	chr1:159678613-159811274	CNV contains gene	8	
FCGR3A	chr1:159778174-159787037	chr1:159678613-159811274	CNV contains gene	8	
GSTM1*	chr1:110031940-110037890	chr1:110016535-110046454	CNV contains gene	572	
GSTP1	chr11:67107641-67110700	chr11:67086933-67088579	CNV within 50kb of gene; no overlap	50	
GSTT1	chr22:22706138-22714284	chr22:22672175-22734564	CNV contains gene	588	
GSTT1	chr22:22706138-22714284	chr22:22673580-22691791	CNV within 50kb of gene; no overlap	607	
HDC	chr15:48321437-48345454	chr15:48172575-48330980	CNV overlaps exon	9	
HIVEP2	chr6:143114296-143308031	chr6:143011827-143158210	CNV overlaps exon	29	
HLA-DPB1	chr6_qbl_hap2:4230100-4243873	chr6:33208725-33209908	CNV within 50kb of gene; no overlap	23	
HLA-DQA1*	chr6:32713160-32719407	chr6:32711490-32772512	CNV contains gene	614	
HLA-DQA1*	chr6:32713160-32719407	chr6:32711984-32887814	CNV contains gene	4	
HLA-DQB1*	chr6_cox_hap1:4008837-4016438	chr6:32711490-32772512	CNV contains gene	614	

HLA-DQB1*	chr6_cox_hap1:4008837-4016438	chr6:32711984-32887814	CNV contains gene	4
HLA-DRB1	chr6_cox_hap1:3870631-3948060	chr6:32630574-32631188	CNV within 50kb of gene; no overlap	93
HLA-DRB1	chr6_cox_hap1:3870631-3948060	chr6:32711490-32772512	CNV contains gene	614
HLA-DRB1	chr6_cox_hap1:3870631-3948060	chr6:32711984-32887814	CNV contains gene	4
IFNA16	chr9:21206371-21207310	chr9:21171453-21196245	CNV within 50kb of gene; no overlap	2
IFNA17	chr9:21217241-21218221	chr9:21171453-21196245	CNV within 50kb of gene; no overlap	2
IL17RA	chr22:15945850-15976584	chr22:16007214-16008539	CNV within 50kb of gene; no overlap	112
IL1B	chr2:113303807-113310827	chr2:113327572-113330620	CNV within 50kb of gene; no overlap	45
IL4R	chr16:27232751-27283600	chr16:27243851-27258578	CNV overlaps exon	21
IL4R	chr16:27232751-27283600	chr16:27331718-27349351	CNV within 50kb of gene; no overlap	30
IL8	chr4:74825086-74828297	chr4:74774226-74775626	CNV within 50kb of gene; no overlap	27
ITGB2	chr21:45130296-45173181	chr21:45221023-45223584	CNV within 50kb of gene; no overlap	70
KCNS3	chr2:17923425-17977706	chr2:17982326-17983503	CNV within 50kb of gene; no overlap	187
KCNS3	chr2:17923425-17977706	chr2:17982337-17982891	CNV within 50kb of gene; no overlap	225
KCNS3	chr2:17923425-17977706	chr2:18005613-18088988	CNV within 50kb of gene; no overlap	10
KLK7	chr19:56171546-56179132	chr19:56201266-56202928	CNV within 50kb of gene; no overlap	60
LBP	chr20:36408298-36439067	chr20:36488458-36489263	CNV within 50kb of gene; no overlap	82
LELP1	chr1:151442542-151444220	chr1:151401490-151402724	CNV within 50kb of gene; no overlap	39
LILRB4	chr19:59865935-59871658	chr19:59899449-59902416	CNV within 50kb of gene; no overlap	84
MBL2	chr10:54195145-54201466	chr10:54214544-54215649	CNV within 50kb of gene; no overlap	13
MMP9	chr20:44070953-44078607	chr20:44039006-44041944	CNV within 50kb of gene; no overlap	29
NOS1	chr12:116130329-116283990	chr12:116178484-116179795	CNV overlaps intron(s)	7
NOS2	chr17:23107918-23151682	chr17:23186439-23199398	CNV within 50kb of gene; no overlap	37
NOS3	chr7:150319076-150342620	chr7:150303463-150308034	CNV within 50kb of gene; no overlap	84
OPRM1	chr6:154402135-154609693	chr6:154488553-154489064	CNV overlaps intron(s)	5
PDE4D*	chr5:58300622-59819682	chr5:59023310-59024650	CNV overlaps intron(s)	74
PDE4D*	chr5:58300622-59819682	chr5:59525372-59532089	CNV overlaps intron(s)	86
PDGFRA	chr4:54790020-54859169	chr4:54795932-54799539	CNV overlaps intron(s)	25
PLA2G2D	chr1:20311020-20318595	chr1:20279685-20283259	CNV within 50kb of gene; no overlap	51
PPARA	chr22:44925162-45018317	chr22:44801601-44911444	CNV within 50kb of gene; no overlap	22
PTPRD	chr9:8304245-10602723	chr9:10394571-10395103	CNV overlaps intron(s)	310
PTPRD	chr9:8304245-10602723	chr9:10629444-10670025	CNV within 50kb of gene; no overlap	7
PTPRD	chr9:8304245-10602723	chr9:9952602-9964221	CNV overlaps intron(s)	6
RLN1	chr9:5324968-5329873	chr9:5375326-5393173	CNV within 50kb of gene; no overlap	3

SERPINA3	chr14:94148466-94160143	chr14:94170293-94171680	CNV within 50kb of gene; no overlap	5	
SFTPD	chr10:81687475-81698841	chr10:81732732-81736867	CNV within 50kb of gene; no overlap	71	
SMAD3*	chr15:65145248-65274587	chr15:65191726-65192658	CNV overlaps intron(s)	31	
SOD2	chr6:160020138-160034343	chr6:160006619-160007464	CNV within 50kb of gene; no overlap	505	
SOD2	chr6:160020138-160034343	chr6:160053749-160055063	CNV within 50kb of gene; no overlap	37	rs9365085(.93)
SPINK5	chr5:147423727-147497118	chr5:147533287-147534392	CNV within 50kb of gene; no overlap	621	
TACR1	chr2:75127097-75280153	chr2:75216693-75236218	CNV overlaps intron(s)	2	
TAP1	chr6:32920963-32929726	chr6:32711984-32887814	CNV contains gene	4	
TAP1	chr6:32920963-32929726	chr6:32903481-32904136	CNV within 50kb of gene; no overlap	515	
TBX21	chr17:43165608-43178484	chr17:43127561-43131328	CNV within 50kb of gene; no overlap	37	
TGFBR3	chr1:91918487-92144147	chr1:92004671-92006010	CNV overlaps intron(s)	628	rs284191 (.61)
TRAF1	chr9:122704491-122731272	chr9:122688017-122882816	CNV contains gene	29	
ACE	chr17:58908153-58929473	No CNV			
ADA	chr20:42681576-42713790	No CNV			
ADAM33	chr20:3596619-3610738	No CNV			
ADH5	chr4:100211152-100228954	No CNV			
ADM	chr11:10283217-10285499	No CNV			
ADORA2A	chr22:23153529-23168325	No CNV			
ADRB2	chr5:148186348-148188390	No CNV			
AGT	chr1:228904891-228916959	No CNV			
AGTR1	chr3:149898347-149943480	No CNV			
AICDA	chr12:8646028-8656709	No CNV			
ALOX5	chr10:45189629-45261573	No CNV			
ALOX5AP	chr13:30185614-30236565	No CNV			
AOAH	chr7:36519073-36730679	No CNV			
AQP5	chr12:48641545-48645728	No CNV			
ARG1	chr6:131936036-131947165	No CNV			
ARG2	chr14:67156331-67188189	No CNV			
BDNF	chr11:27633017-27700181	No CNV			
C3	chr19:6628845-6671662	No CNV			
C5AR1	chr19:52504943-52517167	No CNV			
C5orf20	chr5:134807802-134810937	No CNV			
CAT	chr11:34417047-34450183	No CNV			
CCL11	chr17:29636799-29639312	No CNV			
CCL2	chr17:29606408-29608333	No CNV			

CCL5	chr17:31222608-31231490	No CNV			
CCL8	chr17:29670178-29672534	No CNV			
CCR1	chr3:46218203-46224836	No CNV			
CCR2	chr3:46370238-46377417	No CNV			
CCR3	chr3:46258875-46283201	No CNV			
CCR4	chr3:32968069-32971407	No CNV			
CCR5	chr3:46386636-46392701	No CNV			
CCR6	chr6:167445284-167472619	No CNV			
CCR8	chr3:39346200-39350175	No CNV			
CD14	chr5:139991496-139993470	No CNV			
CD1D	chr1:156416360-156422840	No CNV			
CD34	chr1:206126505-206151306	No CNV			
CD4	chr12:6768898-6800237	No CNV			
CD40	chr20:44180312-44191791	No CNV			
CD74	chr5:149761392-149772692	No CNV			
CD86	chr3:123256898-123322678	No CNV			
CD8A	chr2:86865238-86889030	No CNV			
CFTR	chr7:116907252-117095954	No CNV			
CHI3L1	chr1:201414681-201422545	No CNV			
CHIA	chr1:111635006-111664708	No CNV			
CHML	chr1:239858789-239865855	No CNV			
CHRM1	chr11:62432726-62445588	No CNV			
CHRM3	chr1:237858995-238139340	No CNV			
CLCA1	chr1:86707113-86738562	No CNV			
CMA1	chr14:24044551-24047311	No CNV			
CPM	chr12:67531222-67643287	No CNV			
CRH	chr8:67251165-67253400	No CNV			
CRHR1	chr17:41053492-41268975	No CNV			
CRHR2	chr7:30658083-30706244	No CNV			
CSF2	chr5:131437383-131439762	No CNV			
CTLA4	chr2:204440755-204446928	No CNV			
CTTN	chr11:69922259-69960338	No CNV			
CX3CR1	chr3:39279988-39298230	No CNV			
CXCL10	chr4:77161292-77163713	No CNV			

CXCL12	chr10:44185610-44200551	No CNV			
CXCR1	chr2:218735812-218739961	No CNV			
CXCR2	chr2:218698257-218710221	No CNV			
CYFIP2	chr5:156625668-156755184	No CNV			
CYP24A1	chr20:52203394-52223923	No CNV			
CYP2J2	chr1:60131567-60165011	No CNV			
CYP2R1	chr11:14856131-14870327	No CNV			
CYSLTR2	chr13:48178951-48181499	No CNV			
DEFB1	chr8:6715508-6722939	No CNV			
DENND1B*	chr1:195740501-196011246	No CNV			
EBI3	chr19:4180539-4188524	No CNV			
EDN1	chr6:12398514-12405413	No CNV			
EDNRA	chr4:148621518-148685556	No CNV			
FABP4	chr8:82553286-82558028	No CNV			
FCER1A	chr1:157526127-157544638	No CNV			
FCER1G	chr1:159451710-159455662	No CNV			
FCER2	chr19:7659642-7673032	No CNV			
FGFR1	chr8:38387812-38445509	No CNV			
FGFR2	chr10:123227833-123347962	No CNV			
FLT1	chr13:27772482-27967265	No CNV			
FYN	chr6:112088227-112301348	No CNV			
GATA3	chr10:8136672-8157170	No CNV			
GC	chr4:72826274-72890101	No CNV			
GCLM	chr1:94125177-94147600	No CNV			
GSDMB	chr17:35314373-35328429	No CNV			
HAVCR1	chr5:156389108-156418548	No CNV			
HAVCR2	chr5:156445420-156468826	No CNV			
HLA-G	chr6_cox_hap1:1247153-1251311	No CNV			
HMOX1	chr22:34107059-34120207	No CNV			
HNMT	chr2:138438277-138490404	No CNV			
HPGDS	chr4:95438729-95483050	No CNV			
HRH1	chr3:11153778-11279939	No CNV			
ICAM1	chr19:10242516-10258291	No CNV			
ICOS	chr2:204509715-204534543	No CNV			
IFNA13	chr9:21357370-21358075	No CNV			

IFNA2	chr9:21374253-21375396	No CNV			
IFNA5	chr9:21294612-21295312	No CNV			
IFNA8	chr9:21399145-21400184	No CNV			
IFNB1	chr9:21067103-21067943	No CNV			
IFNG	chr12:66834816-66839788	No CNV			
IFNGR1	chr6:137560313-137582260	No CNV			
IFNGR2	chr21:33697071-33731698	No CNV			
IKBKAP	chr9:110669620-110736429	No CNV			
IL10	chr1:205007570-205012462	No CNV			
IL12B	chr5:158674368-158690059	No CNV			
IL12RB1	chr19:18031370-18058697	No CNV			
IL13	chr5:132021763-132024700	No CNV			
IL15	chr4:142777198-142874590	No CNV			
IL16	chr15:79276273-79392159	No CNV			
IL17A	chr6:52159143-52163395	No CNV			
IL17F	chr6:52209442-52217257	No CNV			
IL18	chr11:111519183-111540050	No CNV			
IL18R1	chr2:102345528-102381649	No CNV			
IL1A	chr2:113247962-113259442	No CNV			
IL1R1*	chr2:102136833-102162766	No CNV			
IL1RL1	chr2:102294393-102334929	No CNV			
IL1RN	chr2:113591940-113608064	No CNV			
IL2	chr4:123592075-123597100	No CNV			
IL25	chr14:22911857-22915452	No CNV			
IL27	chr16:28418183-28425656	No CNV			
IL2RB*	chr22:35851825-35875908	No CNV			
IL3	chr5:131424245-131426795	No CNV			
IL33*	chr9:6205785-6247983	No CNV			
IL4*	chr5:132037271-132046267	No CNV			
IL5	chr5:131905034-131907113	No CNV			
IL5RA	chr3:3083007-3127058	No CNV			
IL9	chr5:135255833-135259415	No CNV			
INPP4A	chr2:98427752-98573928	No CNV			
IRAK3	chr12:64869244-64934661	No CNV			
IRF1	chr5:131845199-	No CNV			

	131854364				
IRF2	chr4:185545869-185632720	No CNV			
ITGB3	chr17:42686206-42745076	No CNV			
ITK	chr5:156540484-156614687	No CNV			
JUN	chr1:59019050-59022373	No CNV			
KAT5	chr11:65236048-65243653	No CNV			
KCNMB1	chr5:169737744-169749216	No CNV			
KMO	chr1:239762056-239825572	No CNV			
LGALS3	chr14:54665687-54681901	No CNV			
LTA	chr6_qbl_hap2:2787458-2789683	No CNV			
LTA4H	chr12:94918661-94961429	No CNV			
LTB4R	chr14:23850544-23857082	No CNV			
LTC4S	chr5:179153591-179156119	No CNV			
MEFV	chr16:3232028-3246628	No CNV			
MIF	chr22:22566564-22567409	No CNV			
MMP2	chr16:54070581-54098087	No CNV			
MS4A2	chr11:59612712-59622516	No CNV			
MTHFR	chr1:11768373-11788747	No CNV			
MUC7	chr4:71330797-71383303	No CNV			
MYLK	chr3:124813832-125085839	No CNV			
NAT2	chr8:18293034-18303003	No CNV			
NCF2	chr1:181791319-181826679	No CNV			
NFKB1	chr4:103641517-103757507	No CNV			
NGFR	chr17:44927653-44947381	No CNV			
NOD1	chr7:30430667-30484918	No CNV			
NOD2	chr16:49288550-49324488	No CNV			
NPPA	chr1:11828353-11830427	No CNV			
NPSR1	chr7:34664421-34884469	No CNV			
OPN3	chr1:239823074-239870324	No CNV			
ORMDL3*	chr17:35330821-35337410	No CNV			
PARP1	chr1:224615014-224662424	No CNV			
PHF11	chr13:48967801-49001118	No CNV			
PIN1	chr19:9806882-9821365	No CNV			
PLA2G7	chr6:46780011-46811389	No CNV			
PLAU	chr10:75340867-75347264	No CNV			

PLAUR	chr19:48842086-48866338	No CNV			
PPARG	chr3:12304348-12450855	No CNV			
PTGDR	chr14:51804180-51813192	No CNV			
PTGDR2	chr11:60374973-60380020	No CNV			
PTGER2	chr14:51850765-51865072	No CNV			
PTGER3	chr1:71090623-71286079	No CNV			
PTGER4	chr5:40715788-40729594	No CNV			
PTGIR	chr19:51815564-51820194	No CNV			
PTGS1	chr9:124173049-124197802	No CNV			
PTGS2	chr1:184907566-184916182	No CNV			
PTPN22	chr1:114157955-114215898	No CNV			
PTPN6	chr12:6926000-6940740	No CNV			
RIPK2	chr8:90839109-90872433	No CNV			
RLN2	chr9:5289867-5294580	No CNV			
RNASE3	chr14:20429401-20430347	No CNV			
RUNX1	chr21:35081967-35343465	No CNV			
RUNX3	chr1:25098588-25164088	No CNV			
SCGB1A1	chr11:61943082-61947254	No CNV			
SCGB3A2	chr5:147238466-147241949	No CNV			
SELE	chr1:167958404-167969844	No CNV			
SELP	chr1:167824711-167866001	No CNV			
SERPINE1	chr7:100557089-100569267	No CNV			
SFSWAP	chr12:130761587-130850235	No CNV			
SFTPA1	chr10:81360646-81365151	No CNV			
SOCS1	chr16:11255774-11257540	No CNV			
STAT1	chr2:191542006-191587221	No CNV			
STAT3	chr17:37718868-37794039	No CNV			
STAT4	chr2:191602546-191724567	No CNV			
STAT6	chr12:55775454-55791463	No CNV			
TBXA2R	chr19:3545503-3557831	No CNV			
TGFB1	chr19:46528651-46551671	No CNV			
TGFB2	chr1:216585298-216684584	No CNV			
TIMD4	chr5:156278870-156322844	No CNV			
TIMP1	chrX:47326633-47331134	No CNV			
TLR1	chr4:38474270-38482807	No CNV			

TLR10	chr4:38450254-38461006	No CNV			
TLR2	chr4:154824890-154846692	No CNV			
TLR4	chr9:119506273-119519590	No CNV			
TLR6	chr4:38501723-38534833	No CNV			
TLR9	chr3:52230135-52235219	No CNV			
TNC	chr9:116821675-116920357	No CNV			
TNF*	chr6_qbl_hap2:2790934-2793699	No CNV			
TNFRSF2 1	chr6:47307226-47385639	No CNV			
TNFRSF8	chr1:12046020-12126851	No CNV			
TNFSF4	chr1:171419492-171443094	No CNV			
TSLP*	chr5:110433676-110441621	No CNV			
TTPA	chr8:64134601-64161166	No CNV			
VCAM1	chr1:100957783-100977189	No CNV			
VDR	chr12:46521586-46585081	No CNV			
VEGFA	chr6:43845923-43862201	No CNV			
ZPBP2	chr17:35277980-35287675	No CNV			

*Denotes “high-confidence” asthma gene, identified via GWAS or replicated in >10 populations