

(A) Summary of FUMA SNP2GENE mapping.

(B) FUMA mapped genes and mapping evidence.

ensg	symbol	chr	start	end	strand	type	entrezID	HUGO	pLI	ncRVIS	posMapSNPs	posMapMaxCADD	eqdMapSNPs	eqtMapminP	eqtMapminQ	eqtMaps	eqtDirection	ciMap	ciMaps	minGwasP	IndSigSNPs	GenomicL_mapped_b	mapped_b	mapped_b	mapped_b	mapping_type		
ENSG00000184588	PDE4B	1	66258197	66840259		1 protein_cox	5142	PDE4B	0.709079	-0.830512	3	16.04	0					No				rs1308048	1	TRUE	FALSE	FALSE	positional	
ENSG00000118473	SGIP1	1	66999066	67213982		1 protein_cox	84251	SGIP1	0.999651	-0.315319	0	0	28	4.15601E-13	9.97589E-26	GTEX/v8/Cells_Cultured_fibroblasts	-	No			1E-19	rs1308048	1	FALSE	TRUE	FALSE	eQTL	
ENSG00000248458	AL139147.1	1	67131547	67142710		-1 protein_coding					0	0	17	1.56339E-05	5.76742E-07	GTEX/v8/Cells_Cultured_fibroblasts	-	No			1E-19	rs1308048	1	FALSE	TRUE	FALSE	eQTL	
ENSG00000152760	TCTEX1D1	1	67218142	67244470		1 protein_cox	200132	TCTEX1D	0.006425	-0.383983	0	0	23	6.35253E-08	2.46718E-56	GTEX/v8/Cells_Cultured_fibroblasts	-	No			1E-19	rs1308048	1	FALSE	TRUE	FALSE	eQTL	
ENSG00000221986	MYBPHL	1	1.1E+08	1.1E+08		-1 protein_cox	343263	MYBPHL	0.004618	0.281706	0	0	2	0.000177798	0.0405922	GTEX/v8/Cells_Cultured_fibroblasts		No				rs6689641	2	FALSE	TRUE	FALSE	eQTL	
ENSG00000197106	SLC6A17	1	1.11E+08	1.11E+08		1 protein_cox	1.02E+08	SLC6A17	0.962735	0.020164	43	14.38	37	6.15679E-07	0.000154891	GTEX/v8/Skin_Sun_Exposed_Lower_le	+	No			7.5E-12	rs6689641	2	TRUE	TRUE	FALSE	positional; eQTL	
ENSG00000143603	KCNN3	1	1.55E+08	1.55E+08		-1 protein_cox	3782	KCNN3	0.864941	-0.629505	2	3.213	0					Yes	Aorta		0.000000029	rs11264244	3	TRUE	FALSE	TRUE	positional; chromatin interaction	
ENSG00000115828	QPCT	2	37571717	37600465		1 protein_cox	25797	QPCT	1.87E-08	0.303395	0	0	1	9.18382E-05	1.75037E-14	GTEX/v8/Cells_Cultured_fibroblasts		No				rs4670813	4	FALSE	TRUE	FALSE	eQTL	
ENSG00000115841	RMDN2	2	38150330	38294285		1 protein_cox	151393	RMDN2	5.21E-16	0.150487	5	16.2	16	4.08718E-07	2.16409E-34	GTEX/v8/Skin_Sun_Exposed_Lower_le		No				rs4670813	4	TRUE	TRUE	FALSE	positional; eQTL	
ENSG00000138061	CYP1B1	2	38294116	38337044		-1 protein_cox	1545	CYP1B1	0.000296	-1.041277	28	16.2	22	1.14153E-08	1.685E-09	GTEX/v8/Artery_Tibial	+	No			7.7E-09	rs4670813	4	TRUE	TRUE	FALSE	positional; eQTL	
ENSG00000138079	SLC3A1	2	44502599	44548633		1 protein_cox	6519	SLC3A1	7.55E-16	-0.018971	14	12.09	0					No					rs1584885	5	TRUE	FALSE	FALSE	positional
ENSG00000138078	PREPL	2	44543420	44589001		-1 protein_cox	9581	PREPL	2.43E-11	0.105865	42	15.97	161	4.80688E-10	2.47831E-06	GTEX/v8/Whole_Blood:GTEX/v8/Arter		Yes	Aorta		0.000000034	rs1584885	5	TRUE	TRUE	TRUE	positional; eQTL; chromatin interaction	
ENSG00000143919	CAMKMT	2	44589089	44999731		1 protein_cox	79823	CAMKMT	5.15E-13	0.21332	153	19.68	42	1.74152E-08	1.5465E-07	GTEX/v8/Whole_Blood	-	Yes	Aorta		0.000000034	rs1584885	5	TRUE	TRUE	TRUE	positional; eQTL; chromatin interaction	
ENSG00000138083	SIX3	2	45168902	45173216		1 protein_cox	6496	SIX3	0.348879	-0.04466	0	0	0					Yes	Aorta			rs1584885	5	FALSE	FALSE	TRUE	chromatin interaction	
ENSG00000170577	SIX2	2	45232300	45236569		-1 protein_cox	10736	SIX2	0.870283		0	0	0					Yes	Aorta		0.000000034	rs1584885	5	FALSE	FALSE	TRUE	chromatin interaction	
ENSG00000136560	TANK	2	1.62E+08	1.62E+08		1 protein_cox	10010	TANK	0.943798	-0.173838	20	19.97	13	6.64091E-05	0.00692465	GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts		Yes	Aorta		0.000000041	rs1267037	6	TRUE	TRUE	TRUE	positional; eQTL; chromatin interaction	
ENSG00000178252	WDR6	3	49044495	49053386		1 protein_cox	11180	WDR6	9.2E-07	-0.05895	0	0	78	2.77659E-07	1.8169E-102	GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_leg		No				rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000185909	KLHDC8B	3	49209044	49213917		1 protein_cox	200942	KLHDC8B	0.010421	-0.077352	0	0	51	0.000224827	8.98072E-20	GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Sun_Exposed_Lower_leg		No				rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000233276	GPX1	3	49394609	49396033		-1 protein_cox	2876	GPX1	0.006932	-0.616399	0	0	58	0.000198778	1.10725E-28	GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Sun_Exposed_Lower_leg		No				rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000145022	TCTA	3	49449639	49453908		1 protein_cox	6988	TCTA	0.013265	-0.595941	0	0	104	6.25752E-06	7.59985E-09	GTEX/v8/Cells_Cultured_fibroblasts		No				rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000145020	AMT	3	49454211	49460186		-1 protein_cox	275	AMT	0.000569	-0.022637	0	0	92	5.74902E-08	2.31462E-81	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Coronary:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic	+	No			0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000145029	NICN1	3	49460379	49466759		-1 protein_cox	84276	NICN1	0.257246	-1.087291	0	0	159	2.35203E-07	3.54662E-24	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial	+	No			0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000164062	APEH	3	49711435	49721396		1 protein_cox	327	APEH	0.013216	-0.271805	0	0	127	2.84065E-06	1.57262E-14	GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic	+	No			0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000173531	MST1	3	49721380	49726934		-1 protein_cox	4485	MST1	1.73E-10	0.158165	0	0	63	0.000077715	6.29643E-13	GTEX/v8/Skin_Sun_Exposed_Lower_le		No				rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000164068	RNF123	3	49726932	49758962		1 protein_cox	63891	RNF123	0.969715	-0.461991	0	0	162	8.28252E-16	2.60502E-20	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Coronary:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_leg	-	No			0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000173540	GMPPB	3	49754277	49761384		-1 protein_cox	386724	GMPPB	8.25E-05	-0.659554	0	0	162	1.59763E-15	3.6504E-63	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Coronary:GTEX/v8/Artery_Tibial:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_leg	-	No			0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000176095	IP6K1	3	49761727	49823975		-1 protein_cox	9807	IP6K1	0.23518	-2.103427	0	0	76	0.000105606	0.000365035	GTEX/v8/Artery_Tibial		No				rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000187492	CDHR4	3	49828165	49837268		-1 protein_cox	389118	CDHR4	0.013474	0.04361	0	0	107	2.86104E-05	2.24065E-06	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial	-	No			0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000185614	FAM212A	3	49840687	49842463		1 protein_cox	389119	FAM212A	0.000589		0	0	162	4.93358E-16	4.55389E-18	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Coronary:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_leg	+	No			0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000182179	UBA7	3	49842640	49851379		-1 protein_cox	1.01E+08	UBA7	2.68E-14	-0.315381	0	0	162	3.7223E-34	2.47495E-51	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_le	+	No			0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000183763	TRAIP	3	49866034	49894007		-1 protein_cox	10293	TRAIP	0.125104	-0.132255	4	17.61	71	0.000120704	0.0101474	GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic		No				rs7428430	7	TRUE	TRUE	FALSE	positional; eQTL	
ENSG00000164076	CAMKV	3	49895421	49907655		-1 protein_cox	79012	CAMKV	0.996846	-0.638323	9	18.51	0					No				rs7428430	7	TRUE	FALSE	FALSE	positional	
ENSG00000164078	MST1R	3	49924435	49941299		-1 protein_cox	4486	MST1R	1.69E-20	-0.377645	14	18.51	162	4.4181E-21	3.12618E-16	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_le	-	No			0.000000014	rs7428430	7	TRUE	TRUE	FALSE	positional; eQTL	
ENSG00000228008	CTD-2330K9.3	3	49941278	49954370		1 protein_coding					10	11.37	162	6.92195E-11	2.36031E-07	GTEX/v8/Artery_Aorta	-	No			0.000000014	rs7428430	7	TRUE	TRUE	FALSE	positional; eQTL	
ENSG00000164077	MON1A	3	49946302	49967606		-1 protein_cox	84315	MON1A	0.006368	-0.629673	16	11.37	111	3.53609E-06	1.16113E-05	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_le	+	No			0.000000014	rs7428430	7	TRUE	TRUE	FALSE	positional; eQTL	

ENSG000000004534	RBM6	3	49977440	50137478	1	protein_cot	10180	RBM6	1	-0.685653	162	17.77	162	1.0332E-130	3.3024E-109	kin_Sun_Exposed_Lower_leg	+	No		0.000000014	rs7428430	7	TRUE	TRUE	FALSE	positional; eQTL
ENSG000000003756	RBM5	3	50126341	50156454	1	protein_cot	10181	RBM5	0.999999	-0.605889	33	18.47	0					No		rs7428430	7	TRUE	FALSE	FALSE	positional	
ENSG000000001617	SEMA3F	3	50192478	50226508	1	protein_cot	6405	SEMA3F	0.999918		4	14.19	162	7.80394E-10	4.02553E-08	GTEx/v8/Artery_Aorta	-	No		0.000000014	rs7428430	7	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000114353	GNAI2	3	50263724	50296787	1	protein_cot	2771	GNAI2	0.86116	-0.965006	0	0	51	0.000108576	0.0122345	GTEx/v8/Skin_Sun_Exposed_Lower_Le		No		rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG00000186792	HYAL3	3	50330262	50336899	-1	protein_cot	8372	HYAL3	1.52E-05	-0.35315	0	0	162	2.17155E-13	9.33926E-66	GTEx/v8/Whole_Blood:GTEx/v8/Arter y_Aorta:GTEx/v8/Artery_Coronary:GT Ex/v8/Artery_Tibial:GTEx/v8/Cells_C ultured_fibroblasts:GTEx/v8/Skin_Not _Sun_Exposed_Suprapubic:GTEx/v8/S	+	No		0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL
ENSG00000243477	NAT6	3	50333833	50336852	-1	protein_cot	24142	NAT6	0.402945	-0.113189	0	0	80	1.86878E-05	1.09112E-10	GTEx/v8/Artery_Aorta:GTEx/v8/Arter y_Tibial:GTEx/v8/Cells_Cultured_fibr oblasts:GTEx/v8/Skin_Sun_Exposed_L ower_leg	-	No		0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL
ENSG00000114378	HYAL1	3	50337320	50349812	-1	protein_cot	3373	HYAL1	0.005537	0.476164	0	0	4	2.41374E-06	3.49963E-17	GTEx/v8/Skin_Sun_Exposed_Lower_Le		No		rs7428430	7	FALSE	TRUE	FALSE	eQTL	
ENSG000000088538	DOCK3	3	50712672	51421629	1	protein_cot	1795	DOCK3	1	-0.836765	0	0	117	1.7937E-07	9.19754E-54	GTEx/v8/Skin_Not_Sun_Exposed_Sup rapubic:GTEx/v8/Skin_Sun_Exposed_ Lower_leg	-	No		0.000000014	rs7428430	7	FALSE	TRUE	FALSE	eQTL
ENSG00000175161	CADM2	3	85008132	86123579	1	protein_cot	253559	CADM2	0.984669	0.117806	125	19.52	0					No		4.6E-11	rs9858244	8	TRUE	FALSE	FALSE	positional
ENSG00000169282	KCNAB1	3	1.56E+08	1.56E+08	1	protein_cot	7881	KCNAB1	0.06655	-0.389326	0	0	2	7.28287E-05	1.16876E-07	GTEx/v8/Cells_Cultured_fibroblasts		No		rs9818780	9	FALSE	TRUE	FALSE	eQTL	
ENSG00000163659	TIPARP	3	1.56E+08	1.56E+08	1	protein_cot	25976	TIPARP	0.997752	-1.247705	0	0	38	6.31002E-08	6.19425E-10	GTEx/v8/Artery_Tibial	-	Yes	Aorta	2.7E-11	rs9818780	9	FALSE	TRUE	TRUE	eQTL; chromatin interaction
ENSG00000197980	LEKR1	3	1.57E+08	1.57E+08	1	protein_cot	389170	LEKR1		-0.029833	22	17.48	38	1.03696E-07	2.26331E-22	GTEx/v8/Artery_Tibial:GTEx/v8/Skin_ Not_Sun_Exposed_Suprapubic:GTEx/v	+	Yes	Aorta	2.7E-11	rs9818780	9	TRUE	TRUE	TRUE	positional; eQTL; chromatin interaction
ENSG00000163660	CCNL1	3	1.57E+08	1.57E+08	-1	protein_cot	57018	CCNL1	0.942873	-0.738927	0	0	0					Yes	Aorta	rs9818780	9	FALSE	FALSE	TRUE	chromatin interaction	
ENSG00000073282	TP63	3	1.89E+08	1.9E+08	1	protein_cot	8626	TP63	0.983222	-0.204819	0	0	0					Yes	Aorta	1.4E-09	rs56360320	10	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000178950	GAK	4	843064	926161	-1	protein_cot	2580	GAK	0.973135	-0.566431	2	6.253	5	4.71522E-06	0.00143231	GTEx/v8/Cells_Cultured_fibroblasts		No		rs111391498	11	TRUE	TRUE	FALSE	positional; eQTL	
ENSG00000127419	TMEM175	4	926175	952444	1	protein_cot	84286	TMEM175	0.00044		4	22.4	0					No		rs111391498	11	TRUE	FALSE	FALSE	positional	
ENSG00000145214	DGKQ	4	952675	980683	-1	protein_cot	1609	DGKQ	0.001194	1.058691	1	22.4	7	0.000107624	1.3132E-162	GTEx/v8/Whole_Blood:GTEx/v8/Skin _Sun_Exposed_Lower_leg		No		rs111391498	11	TRUE	TRUE	FALSE	positional; eQTL	
ENSG00000127415	IDUA	4	980785	998316	1	protein_cot	3425	IDUA	2.64E-08		0	0	6	6.64928E-05	2.65324E-13	GTEx/v8/Whole_Blood:GTEx/v8/Arter y_Aorta		No		rs111391498	11	FALSE	TRUE	FALSE	eQTL	
ENSG00000127418	FGFRL1	4	1003724	1020685	1	protein_cot	53834	FGFRL1	0.582187	0.211896	1	3.175	0					No		rs111391498	11	TRUE	FALSE	FALSE	positional	
ENSG00000178222	RNF212	4	1050038	1107350	-1	protein_cot	285498	RNF212	0.125226		2	1.035	0					No		rs111391498	11	TRUE	FALSE	FALSE	positional	
ENSG00000159674	SPON2	4	1160720	1202750	-1	protein_cot	1E+08	SPON2	1.09E-06		4	3.713	0					No		rs111391498	11	TRUE	FALSE	FALSE	positional	
ENSG00000159692	CTBP1	4	1205236	1243741	-1	protein_cot	1487	CTBP1	0.979764		2	1.95	8	4.82189E-05	1.31967E-09	GTEx/v8/Skin_Not_Sun_Exposed_Sup rapubic:GTEx/v8/Skin_Sun_Exposed_ Lower_leg	+	No		6.9E-24	rs111391498	11	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000090316	MAEA	4	1283639	1333935	1	protein_cot	1.02E+08	MAEA	0.844858	-1.287561	3	7.446	18	1.52318E-10	8.98885E-28	GTEx/v8/Whole_Blood:GTEx/v8/Arter y_Aorta:GTEx/v8/Artery_Tibial:GTEx/ v8/Skin_Not_Sun_Exposed_Suprapubic :GTEx/v8/Skin_Sun_Exposed_Lower_L eg	+	No		6.9E-24	rs111391498	11	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000163945	UVSSA	4	1341054	1381837	1	protein_cot	57654	UVSSA	8.89E-14	0.251081	2	7.446	18	3.46093E-82	3.15364E-71	GTEx/v8/Whole_Blood:GTEx/v8/Arter y_Aorta:GTEx/v8/Artery_Coronary:GT Ex/v8/Artery_Tibial:GTEx/v8/Cells_C ultured_fibroblasts:GTEx/v8/Skin_Not _Sun_Exposed_Suprapubic:GTEx/v8/S kin_Sun_Exposed_Lower_leg	-	No		6.9E-24	rs111391498	11	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000179979	CRIPAK	4	1385340	1389780	1	protein_cot	285464	CRIPAK	2.43E-12	1.570277	0	0	18	5.2407E-110	3.38854E-95	GTEx/v8/Whole_Blood:GTEx/v8/Arter y_Aorta:GTEx/v8/Artery_Coronary:GT Ex/v8/Artery_Tibial:GTEx/v8/Cells_C ultured_fibroblasts:GTEx/v8/Skin_Not _Sun_Exposed_Suprapubic:GTEx/v8/S	-	No		6.9E-24	rs111391498	11	FALSE	TRUE	FALSE	eQTL
ENSG00000113407	TARS	5	33440802	33469644	1	protein_cot	6897	TARS	1.19E-09	0.339921	0	0	0					Yes	Aorta	2.5E-10	rs116125333	12	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000151388	ADAMTS12	5	33523640	33892297	-1	protein_cot	81792	ADAMTS1	1.54E-11	-0.335727	10	6.896	0					No		rs116125333	12	TRUE	FALSE	FALSE	positional	
ENSG00000182631	RXFP3	5	33936491	33939023	1	protein_cot	51289	RXFP3	2.31E-11	-0.665067	1	5.725	0					No		2.5E-10	rs116125333	12	TRUE	FALSE	FALSE	positional
ENSG00000113448	PDE4D	5	58264865	59817947	-1	protein_cot	5144	PDE4D	0.9832	0.966489	51	15.57	0					No		0.000000027	rs11739906	13	TRUE	FALSE	FALSE	positional
ENSG00000153140	CETN3	5	89688078	89705603	-1	protein_cot	1070	CETN3	0.011321	-0.797954	0	0	0					Yes	Aorta	0.000000002	rs6882046	14	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000176018	LYSMD3	5	89811428	89825401	-1	protein_cot	116068	LYSMD3	0.771815	-1.12509	0	0	0					Yes	Aorta	0.000000002	rs6882046	14	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000164199	GPR98	5	89825161	90460038	1	protein_cot	84059	GPR98	8.11E-24	-0.086563	0	0	0					Yes	Aorta	0.000000002	rs6882046	14	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000112679	DUSP22	6	291630	351355	1	protein_cot	1.01E+08	DUSP22	0.004307		0	0	0					Yes	Aorta	1E-200	rs12203592	15	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000137265	IRF4	6	391739	411447	1	protein_cot	3662	IRF4	0.922221	2.344452	2	11.78	2	2.07501E-12	2.0571E-08	GTEx/v8/Whole_Blood:GTEx/v8/Skin _Sun_Exposed_Lower_leg	-	No		1E-200	rs12203592	15	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000112685	EXOC2	6	485133	693117	-1	protein_cot	55770	EXOC2	0.000115	-0.462649	19	7.115	14	8.66371E-15	5.27472E-42	GTEx/v8/Whole_Blood:GTEx/v8/Arter y_Aorta:GTEx/v8/Artery_Coronary:GT Ex/v8/Artery_Tibial:GTEx/v8/Cells_C ultured_fibroblasts:GTEx/v8/Skin_Not _Sun_Exposed_Suprapubic	-	No		1.8E-25	rs9328259	15	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000231925	TAPBP	6	33267471	33282164	-1	protein_cot	6892	TAPBP	0.000394	0.574655	0	0	6	3.63308E-09	3.29001E-38	GTEx/v8/Whole_Blood:GTEx/v8/Arter y_Aorta:GTEx/v8/Artery_Tibial:GTEx/ v8/Cells_Cultured_fibroblasts:GTEx/v8 /Skin_Sun_Exposed_Lower_leg	+	No		3.8E-17	rs511515	16	FALSE	TRUE	FALSE	eQTL
ENSG00000204209	DAXX	6	33286335	33297046	-1	protein_cot	1616	DAXX	0.842737	0.017443	0	0	6	1.0468E-08	5.72706E-97	GTEx/v8/Artery_Aorta:GTEx/v8/Cells _Cultured_fibroblasts	+	No</								

ENSG00000164663	USP49	6	41757634	41863099	-1 protein_coc	25862 USP49	0.943537	-0.757279	30	15.03	49	2.27286E-21	1.08387E-16	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	-	No		2.8E-11	rs7768317	17	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000124641	MED20	6	41873092	41888877	-1 protein_coc	9477 MED20	0.488943	-0.778207	15	15.03	49	3.63722E-13	2.42625E-13	GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	+	No		2.8E-11	rs7768317	17	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000112578	BYSL	6	41888926	41900784	1 protein_coc	705 BYSL	0.067321	-0.265913	9	9.679	0					No			rs7768317	17	TRUE	FALSE	FALSE	positional
ENSG00000112576	CCND3	6	41902671	42018095	-1 protein_coc	896 CCND3	0.946445	-0.503494	30	12.65	0					No		2.8E-11	rs7768317	17	TRUE	FALSE	FALSE	positional
ENSG00000255633	MTRNR2L9	6	62284008	62284534	1 protein_coc	1E+08 MTRNR2L9		1.021262	0	0	0					Yes	Aorta		rs62423175	18	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000112232	KHDRBS2	6	62389865	62996132	-1 protein_coc	202559 KHDRBS2	0.142878	-0.854757	85	19.98	0					Yes	Aorta		rs62423175	18	TRUE	FALSE	TRUE	positional; chromatin interaction
ENSG00000153814	JAZF1	7	27870192	28220362	-1 protein_coc	221895 JAZF1	0.958302	-0.943258	24	13.03	21	2.23282E-19	8.69357E-15	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts	+	No		1.9E-10	rs849138	21	TRUE	TRUE	FALSE	positional; eQTL
ENSG000000005483	KMT2E	7	1.05E+08	1.05E+08	1 protein_coc	55904 KMT2E		1 -0.608756	23	5.923	0					Yes	Aorta		rs7794036	22	TRUE	FALSE	TRUE	positional; chromatin interaction
ENSG00000135250	SRPK2	7	1.05E+08	1.05E+08	-1 protein_coc	6733 SRPK2	0.997504	-0.650865	197	15.45	199	1.98472E-25	5.37141E-20	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial	+	No		9.1E-11	rs7794036	22	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000104447	TRPS1	8	1.16E+08	1.17E+08	-1 protein_coc	7227 TRPS1	0.990109	-0.347408	184	21.4	0					No		1.6E-33	rs2737217	23	TRUE	FALSE	FALSE	positional
ENSG00000147677	EIF3H	8	1.18E+08	1.18E+08	-1 protein_coc	8667 EIF3H	0.465051	1.14863	0	0	0					Yes	Aorta		rs2737217	23	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000147679	UTP23	8	1.18E+08	1.18E+08	1 protein_coc	84294 UTP23	0.033109	-0.373647	0	0	0					Yes	Aorta		rs2737217	23	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000153714	LURAP1L	9	12775020	12822130	1 protein_coc	286343 LURAP1L	0.076624	0.220603	3	2.208	3	2.56017E-06	1.15047E-07	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial		No			rs7034354	24	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000173068	BNC2	9	16409501	16870841	-1 protein_coc	54796 BNC2	0.999466	0.551639	40	19.31	27	1.02155E-07	0.000349196	GTEX/v8/Whole_Blood:GTEX/v8/Cells_Cultured_fibroblasts	+	No		8.3E-55	rs10962612;rs1274578351	25	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000188487	INSC	11	15133970	15268754	1 protein_coc	387755 INSC	1.34E-09	1.092071	0	0	0					Yes	Aorta		rs4578351	27	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000110693	SOX6	11	15987995	16761138	-1 protein_coc	55553 SOX6	0.999531	-2.522581	159	22.5	0					No		2.7E-15	rs1437635;rs4578351	27	TRUE	FALSE	FALSE	positional
ENSG00000110696	C11orf58	11	16634679	16778428	1 protein_coc	10944 C11orf58	0.709037	-0.720486	45	22.5	0					No			rs4578351	27	TRUE	FALSE	FALSE	positional
ENSG00000070081	NUCB2	11	17229700	17371521	1 protein_coc	4925 NUCB2	8.59E-08	-0.172074	0	0	1	0.000181385	5.46343E-07	GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic		No			rs4578351	27	FALSE	TRUE	FALSE	eQTL
ENSG00000162341	TPCN2	11	68816365	68858072	1 protein_coc	219931 TPCN2	2.06E-06	0.177153	18	24.7	8	3.13826E-05	2.10711E-13	GTEX/v8/Artery_Tibial:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	+	No		2.6E-16	rs150527451	28	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000123892	RAB38	11	87846410	87908635	-1 protein_coc	23682 RAB38	0.004718	0.74959	0	0	0					Yes	Aorta	0.000000029	rs75459010	29	FALSE	FALSE	TRUE	chromatin interaction
ENSG00000109861	CTSC	11	88026760	88070955	-1 protein_coc	1075 CTSC	0.000817	-0.017991	3	6.594	0					No		0.000000029	rs75459010	29	TRUE	FALSE	FALSE	positional
ENSG00000168959	GRM5	11	88237744	88799113	-1 protein_coc	2915 GRM5	0.985984	-0.290923	1	1.307	0					No			rs1126809	30	TRUE	FALSE	FALSE	positional
ENSG00000077498	TYR	11	88910620	89028927	1 protein_coc	7299 TYR	7.26E-21	0.225785	59	29.4	0					No		1E-200	rs1126809	30	TRUE	FALSE	FALSE	positional
ENSG00000086991	NOX4	11	89057524	89322779	-1 protein_coc	50507 NOX4	8.16E-07	-0.057646	6	11.51	0					Yes	Aorta		rs1126809	30	TRUE	FALSE	TRUE	positional; chromatin interaction
ENSG00000165805	C12orf50	12	88373816	88427814	-1 protein_coc	160419 C12orf50	0.000154	-0.195618	2	13.69	0					No			rs11104733	31	TRUE	FALSE	FALSE	positional
ENSG00000133641	C12orf29	12	88427623	88443937	1 protein_coc	91298 C12orf29	2.46E-05	-0.784049	1	13.69	0					No			rs11104733	31	TRUE	FALSE	FALSE	positional
ENSG00000198707	CEP290	12	88442793	88535993	-1 protein_coc	80184 CEP290	1.04E-34	-0.583027	5	23.9	2	0.000364079	0.0023372	GTEX/v8/Cells_Cultured_fibroblasts		No		2.4E-09	rs11104733	31	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000139324	TMTC3	12	88536073	88593664	1 protein_coc	160418 TMTC3	0.009052	-1.978736	3	7.786	37	5.2325E-12	9.67639E-27	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	+	No		2.4E-09	rs11104733	31	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000049130	KITLG	12	88886570	88974628	-1 protein_coc	4254 KITLG	0.50853	-0.184131	8	10.9	0					Yes	Aorta		rs11104733	31	TRUE	FALSE	TRUE	positional; chromatin interaction
ENSG00000139344	AMDHD1	12	96337071	96362370	1 protein_coc	144193 AMDHD1	2.47E-06	0.278943	8	10.11	12	6.23313E-17	7.40795E-61	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Coronary:GTEX/v8/Artery_Tibial	+	No		8.5E-50	rs3213737	32	TRUE	TRUE	FALSE	positional; eQTL
ENSG000000084110	HAL	12	96366440	96390143	-1 protein_coc	3034 HAL	5.91E-17	1.01388	11	10.11	12	6.3315E-80	1.37419E-68	GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	-	No		8.5E-50	rs3213737	32	TRUE	TRUE	FALSE	positional; eQTL
ENSG000000068650	ATP11A	13	1.13E+08	1.14E+08	1 protein_coc	23250 ATP11A	0.967334	1.384817	17	10.98	13	1.12484E-05	3.78121E-09	GTEX/v8/Skin_Sun_Exposed_Lower_Leg	+	No		2.2E-20	rs1278766	33	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000126217	MCF2L	13	1.14E+08	1.14E+08	1 protein_coc	23263 MCF2L	0.795541		4	3.566	0					No			rs1278766	33	TRUE	FALSE	FALSE	positional
ENSG00000128731	HERC2	15	28356186	28567298	-1 protein_coc	1.02E+08 HERC2		1	10	15.81	9	1.51346E-23	3.31068E-72	GTEX/v8/Whole_Blood	-	No		1.5E-138	rs12913832	34	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000134160	TRPM1	15	31293264	31453476	-1 protein_coc	4308 TRPM1	1.17E-31	0.118421	14	11.69	13	6.05863E-18	2.18528E-13	GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	+	No		5.1E-09	rs11070811	35	TRUE	TRUE	FALSE	positional; eQTL
ENSG000000059122	FLYWCH1	16	2961938	3001209	1 protein_coc	84256 FLYWCH1		0.098492	0	0	1	0.000149986	2.77683E-80	GTEX/v8/Cells_Cultured_fibroblasts		No			rs9926609	36	FALSE	TRUE	FALSE	eQTL
ENSG00000262621	NAA60	16	3415099	3536960	1 protein_coc	79903		0.828474	45	16.91	0					No		0.000000025	rs9926609	36	TRUE	FALSE	FALSE	positional
ENSG00000167981	ZNF597	16	3486104	3493542	-1 protein_coc	146434 ZNF597	0.134236	0.297157	2	3.481	40	5.99514E-10	1.83764E-06	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial	+	No		0.000000025	rs9926609	36	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000122390	NAA60	16	3493611	3536963	1 protein_coc	79903 NAA60	0.908883	0.828474	45	16.91	41	3.44863E-27	3.77401E-22	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	-	No		0.000000025	rs9926609	36	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000215131	C16orf90	16	3543484	3545480	-1 protein_coc	646174 C16orf90	0.002406	-0.034097	19	12.6	0					No		0.000000025	rs9926609	36	TRUE	FALSE	FALSE	positional
ENSG00000103351	CLUAP1	16	3550924	3589048	1 protein_coc	23059 CLUAP1	0.00022	-0.023522	2	1.398	20	4.9523E-06	8.26458E-80	GTEX/v8/Artery_Tibial		No		0.000000025	rs9926609	36	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000175595	ERCC4	16	14014014	14046202	1 protein_coc	2072 ERCC4	3.33E-10	1.194015	73	14.03	0					Yes	Aorta	7.9E-31	rs11648436;rs11648436	37	TRUE	FALSE	TRUE	positional; chromatin interaction
ENSG00000186260	MKL2	16	14165178	14360630	1 protein_coc	57496 MKL2	0.999938	0.37478	1	10.59	0					Yes	Aorta	7.9E-31	rs117462393;rs117462393	37	TRUE	FALSE	TRUE	positional; chromatin interaction
ENSG00000158717	RNF166	16	88762903	88772829	-1 protein_coc	115992 RNF166	0.551621	0.602589	0	0	20	1.45603E-05	7.73748E-62	GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Lower_Leg		No			rs1805007	38	FALSE	TRUE	FALSE	eQTL
ENSG00000167522	ANKRD11	16	89334038	89556969	-1 protein_coc	29123 ANKRD11		1	1	1.592	2	3.95041E-05	1.15145E-10	GTEX/v8/Whole_Blood	+	No		0.000000012	rs75300484;rs1805007	38	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000178773	CPNE7	16	89642176	89663654	1 protein_coc	27132 CPNE7	1.63E-13		2	7.593	61	3.34329E-11	5.51585E-09	GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	-	No		1E-200	rs1805008;rs1805007	38	TRUE	TRUE	FALSE	positional; eQTL
ENSG000000015413	DPEP1	16	89679716	89704839	1 protein_coc	1800 DPEP1	0.000136	-0.167373	16	3.108	0					No			rs1805007;rs13332673	38	TRUE	FALSE	FALSE	positional
ENSG00000131165	CHMP1A	16	89710839	89724253	-1 protein_coc	5119 CHMP1A	0.252037	0.2287	18	9.428	87	4.02177E-13	1.58921E-27	GTEX/v8/Whole_Blood:GTEX/v8/Artery_Aorta:GTEX/v8/Artery_Tibial:GTEX/v8/Cells_Cultured_fibroblasts:GTEX/v8/Skin_Not_Sun_Exposed_Suprapubic:GTEX/v8/Skin_Sun_Exposed_Lower_Leg	-	No		1E-200	rs13332673;rs1805007	38	TRUE	TRUE	FALSE	positional; eQTL
ENSG00000167523	SPATA33	16	89724210	89737680	1 protein_coc	124045 SPATA33	2.73E-06	0.425958	21	9.428	77	4.99645E-08	1.32602E-09	GTEX/v8/Whole_Blood	-	No		1E-200	rs1805007;rs1805007	38	TRUE	TRUE	FALSE	positional; eQTL

(C) Gene2Func GTEx tissue enrichment results restricted to study-relevant tissues.

Category	GeneSet	N_genes	N_overlap	GeneRatio	p	adjP	neglog10P
DEG.down	Artery_Coronary	863	10	0.011587486	0.238988	1	0.621623315
DEG.down	Skin_Sun_Exposed_Lower_leg	2123	22	0.010362694	0.253235	1	0.596475552
DEG.down	Cells_Cultured_fibroblasts	1713	18	0.010507881	0.262132	1	0.581479139
DEG.down	Skin_Not_Sun_Exposed_Suprapubic	2330	23	0.009871245	0.327905	1	0.48425166
DEG.up	Cells_Cultured_fibroblasts	3686	34	0.009224091	0.435556	1	0.360956449
DEG.up	Skin_Not_Sun_Exposed_Suprapubic	2037	18	0.008836524	0.548292	1	0.260988193
DEG.down	Artery_Tibial	1746	15	0.008591065	0.595174	1	0.225356227
DEG.up	Artery_Aorta	2103	18	0.008559201	0.605207	1	0.218096295
DEG.up	Skin_Sun_Exposed_Lower_leg	2163	18	0.008321775	0.654259	1	0.184250041
DEG.down	Artery_Aorta	1323	10	0.007558579	0.747103	1	0.1266195
DEG.down	Whole_Blood	6321	49	0.007751938	0.900809	1	0.045367523
DEG.up	Artery_Tibial	2175	14	0.006436782	0.927845	1	0.032524795
DEG.up	Whole_Blood	1299	7	0.005388761	0.948406	1	0.023005504
DEG.up	Artery_Coronary	1593	8	0.005021971	0.976522	1	0.010317907