

Supplementary table S7 eQTL values of the BC-associated SNPs of the MMP genes
 (according to Genotype-Tissue Expression (GTEx) (<http://www.gtexportal.org/>) (p <8.0E5, FDR≤0.05)

Chr	SNP	Gene Symbol	Variant Id	P-Value
11	rs1940475	MMP27	chr11_102722517_T_C_b38	0.00000000000022
		MMP27	chr11_102722517_T_C_b38	0.0000000000017
		MMP27	chr11_102722517_T_C_b38	0.0000000006
		RP11-817J15.3	chr11_102722517_T_C_b38	0.0000000055
		MMP27	chr11_102722517_T_C_b38	0.0000000068
		RP11-817J15.3	chr11_102722517_T_C_b38	0.00000038
		MMP27	chr11_102722517_T_C_b38	0.000011
11	rs1799750	MMP1	chr11_102799764_TC_T_b38	9.6E-84
		MMP1	chr11_102799764_TC_T_b38	1.3E-25
		MMP1	chr11_102799764_TC_T_b38	1.9E-25
		MMP1	chr11_102799764_TC_T_b38	5.8E-23
		MMP1	chr11_102799764_TC_T_b38	0.0000000000000001
		MMP1	chr11_102799764_TC_T_b38	0.0000000000000066
		MMP1	chr11_102799764_TC_T_b38	0.00000000000022
		MMP1	chr11_102799764_TC_T_b38	0.00000000013
		MMP1	chr11_102799764_TC_T_b38	0.0000000015
		MMP1	chr11_102799764_TC_T_b38	0.0000000024
		MMP1	chr11_102799764_TC_T_b38	0.000000038
		MMP10	chr11_102799764_TC_T_b38	0.0000025
		MMP1	chr11_102799764_TC_T_b38	0.0000028
		MMP1	chr11_102799764_TC_T_b38	0.0000075
		WTAPP1	chr11_102799764_TC_T_b38	0.00004
11	rs679620	WTAPP1	11_102713620_T_C_b37	0.0000000045
		MMP1	11_102713620_T_C_b37	0.0000000047
		MMP1	11_102713620_T_C_b37	0.000023
16	rs243865	RP11-212I21.2	chr16_55477894_C_T_b38	0.000061
20	rs3918242	SLC12A5	chr20_46007337_C_T_b38	4.6E-26
		SLC12A5	chr20_46007337_C_T_b38	2.7E-24
		SLC12A5	chr20_46007337_C_T_b38	8.5E-23
		SLC12A5	chr20_46007337_C_T_b38	0.000000000002
		SLC12A5	chr20_46007337_C_T_b38	0.000000000003
		SLC12A5	chr20_46007337_C_T_b38	0.000000000002
		SLC12A5	chr20_46007337_C_T_b38	0.000000000028
		SLC12A5	chr20_46007337_C_T_b38	0.00000000015
		SLC12A5	chr20_46007337_C_T_b38	0.0000000003
		SLC12A5	chr20_46007337_C_T_b38	0.0000000049
		SLC12A5	chr20_46007337_C_T_b38	0.000000016
		PLTP	chr20_46007337_C_T_b38	0.00000026

		<i>SLC12A5</i>	chr20_46007337_C_T_b38	0.00000079
		<i>PLTP</i>	chr20_46007337_C_T_b38	0.0000019
		<i>SLC12A5</i>	chr20_46007337_C_T_b38	0.0000025
		<i>SLC12A5</i>	chr20_46007337_C_T_b38	0.0000035
		<i>RPL13P2</i>	chr20_46007337_C_T_b38	0.0000052
		<i>MMP9</i>	chr20_46007337_C_T_b38	0.0000087
		<i>SNX21</i>	chr20_46007337_C_T_b38	0.000011
		<i>SLC12A5</i>	chr20_46007337_C_T_b38	0.000019
		<i>WFDC3</i>	chr20_46007337_C_T_b38	0.000028
		<i>PLTP</i>	chr20_46007337_C_T_b38	0.00003
		<i>PLTP</i>	chr20_46007337_C_T_b38	0.000033
		<i>SLC12A5</i>	chr20_46007337_C_T_b38	0.000035
		<i>DNTTIP1</i>	chr20_46007337_C_T_b38	0.000053
		<i>MMP9</i>	chr20_46007337_C_T_b38	0.000064
		<i>PLTP</i>	chr20_46007337_C_T_b38	0.000075
		<i>WFDC3</i>	chr20_46007337_C_T_b38	0.000085
		<i>SYS1</i>	chr20_46007337_C_T_b38	0.000096
		<i>PLTP</i>	chr20_46007337_C_T_b38	0.00011
		<i>WFDC3</i>	chr20_46007337_C_T_b38	0.00015
		<i>PLTP</i>	chr20_46007337_C_T_b38	0.00016
20	rs3918249	<i>SLC12A5</i>	chr20_46009497_T_C_b38	0.000000000000055
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.00000000000015
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.00000000000013
		<i>NEURL2</i>	chr20_46009497_T_C_b38	0.0000000000043
		<i>MMP9</i>	chr20_46009497_T_C_b38	0.000000000065
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.00000000012
		<i>RP3-337O18.9</i>	chr20_46009497_T_C_b38	0.000000012
		<i>NEURL2</i>	chr20_46009497_T_C_b38	0.000000014
		<i>ZSWIM1</i>	chr20_46009497_T_C_b38	0.000000018
		<i>ZNF335</i>	chr20_46009497_T_C_b38	0.000000026
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.000000053
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.000000015
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.000000016
		<i>RP3-337O18.9</i>	chr20_46009497_T_C_b38	0.000000023
		<i>ZNF335</i>	chr20_46009497_T_C_b38	0.000000028
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.000000029
		<i>MMP9</i>	chr20_46009497_T_C_b38	0.000000034
		<i>RP11-465L10.10</i>	chr20_46009497_T_C_b38	0.000000041
		<i>SPATA25</i>	chr20_46009497_T_C_b38	0.000000056
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.000000057
		<i>RP3-337O18.9</i>	chr20_46009497_T_C_b38	0.000000063
		<i>NEURL2</i>	chr20_46009497_T_C_b38	0.00000011
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.00000016
		<i>PLTP</i>	chr20_46009497_T_C_b38	0.00000023
		<i>RP3-337O18.9</i>	chr20_46009497_T_C_b38	0.00000035
		<i>NEURL2</i>	chr20_46009497_T_C_b38	0.00000036

	<i>PCIF1</i>	chr20_46009497_T_C_b38	0.0000056	
	<i>PLTP</i>	chr20_46009497_T_C_b38	0.000012	
	<i>CD40</i>	chr20_46009497_T_C_b38	0.000013	
	<i>PLTP</i>	chr20_46009497_T_C_b38	0.000016	
	<i>CD40</i>	chr20_46009497_T_C_b38	0.000026	
	<i>DNTTIP1</i>	chr20_46009497_T_C_b38	0.000029	
	<i>MMP9</i>	chr20_46009497_T_C_b38	0.000031	
	<i>DNTTIP1</i>	chr20_46009497_T_C_b38	0.000041	
	<i>NEURL2</i>	chr20_46009497_T_C_b38	0.000049	
	<i>PLTP</i>	chr20_46009497_T_C_b38	0.000049	
	<i>CD40</i>	chr20_46009497_T_C_b38	0.000057	
	<i>PLTP</i>	chr20_46009497_T_C_b38	0.000062	
	<i>WFDC3</i>	chr20_46009497_T_C_b38	0.000062	
	<i>RP3-337018.9</i>	chr20_46009497_T_C_b38	0.000083	
	<i>DNTTIP1</i>	chr20_46009497_T_C_b38	0.00012	
	<i>SNX21</i>	chr20_46009497_T_C_b38	0.00014	
	<i>WFDC10B</i>	chr20_46009497_T_C_b38	0.00019	
	<i>SPATA25</i>	chr20_46009497_T_C_b38	0.0002	
20	rs17576	<i>PLTP</i>	chr20_46011586_A_G_b38	0.000000000000015
		<i>SLC12A5</i>	chr20_46011586_A_G_b38	0.00000000000073
		<i>NEURL2</i>	chr20_46011586_A_G_b38	0.00000000000073
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.000000000019
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.000000000038
		<i>RP3-337018.9</i>	chr20_46011586_A_G_b38	0.0000000011
		<i>NEURL2</i>	chr20_46011586_A_G_b38	0.0000000022
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.0000000031
		<i>ZSWIM1</i>	chr20_46011586_A_G_b38	0.0000000034
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.0000000038
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.0000000089
		<i>MMP9</i>	chr20_46011586_A_G_b38	0.0000000019
		<i>RP3-337018.9</i>	chr20_46011586_A_G_b38	0.0000000047
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.000000005
		<i>RP3-337018.9</i>	chr20_46011586_A_G_b38	0.0000000069
		<i>SPATA25</i>	chr20_46011586_A_G_b38	0.0000000082
		<i>NEURL2</i>	chr20_46011586_A_G_b38	0.0000000092
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.00000001
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.000000013
		<i>NEURL2</i>	chr20_46011586_A_G_b38	0.000000021
		<i>RP11-465L10.10</i>	chr20_46011586_A_G_b38	0.000000041
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.000000056
		<i>ZNF335</i>	chr20_46011586_A_G_b38	0.000000077
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.00000019
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.00000025
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.00000027
		<i>PLTP</i>	chr20_46011586_A_G_b38	0.0000003
		<i>RP3-337018.9</i>	chr20_46011586_A_G_b38	0.00000058

	ZNF335	chr20_46011586_A_G_b38	0.0000062	
	PCIF1	chr20_46011586_A_G_b38	0.0000076	
	PLTP	chr20_46011586_A_G_b38	0.0000089	
	NEURL2	chr20_46011586_A_G_b38	0.000013	
	RP3-337O18.9	chr20_46011586_A_G_b38	0.000018	
	NEURL2	chr20_46011586_A_G_b38	0.000018	
	SLC12A5	chr20_46011586_A_G_b38	0.000023	
	NEURL2	chr20_46011586_A_G_b38	0.000035	
	MMP9	chr20_46011586_A_G_b38	0.000036	
	CD40	chr20_46011586_A_G_b38	0.000041	
	NEURL2	chr20_46011586_A_G_b38	0.000052	
	CD40	chr20_46011586_A_G_b38	0.000069	
	RP3-337O18.9	chr20_46011586_A_G_b38	0.000074	
	WFDC3	chr20_46011586_A_G_b38	0.000099	
	CD40	chr20_46011586_A_G_b38	0.000099	
	DNTTIP1	chr20_46011586_A_G_b38	0.00012	
	RP3-337O18.9	chr20_46011586_A_G_b38	0.00013	
	SLC12A5	chr20_46011586_A_G_b38	0.00014	
20	rs3787268	NEURL2	chr20_46013092_G_A_b38	0.000000000059
		NEURL2	chr20_46013092_G_A_b38	0.0000000005
		RP3-337O18.9	chr20_46013092_G_A_b38	0.0000000011
		SLC12A5	chr20_46013092_G_A_b38	0.00000012
		SPATA25	chr20_46013092_G_A_b38	0.00000015
		RP3-337O18.9	chr20_46013092_G_A_b38	0.00000018
		ZNF335	chr20_46013092_G_A_b38	0.00000045
		PLTP	chr20_46013092_G_A_b38	0.0000005
		ZSWIM1	chr20_46013092_G_A_b38	0.00000066
		PLTP	chr20_46013092_G_A_b38	0.000002
		PLTP	chr20_46013092_G_A_b38	0.0000022
		RP3-337O18.9	chr20_46013092_G_A_b38	0.0000035
		RP3-337O18.9	chr20_46013092_G_A_b38	0.000014
		NEURL2	chr20_46013092_G_A_b38	0.000017
		SLC12A5	chr20_46013092_G_A_b38	0.00002
		PLTP	chr20_46013092_G_A_b38	0.000021
		CD40	chr20_46013092_G_A_b38	0.000022
		NEURL2	chr20_46013092_G_A_b38	0.00003
		PLTP	chr20_46013092_G_A_b38	0.000036
		PLTP	chr20_46013092_G_A_b38	0.000075
		PLTP	chr20_46013092_G_A_b38	0.000076
		CD40	chr20_46013092_G_A_b38	0.000098
		ZNF335	chr20_46013092_G_A_b38	0.00015
20	rs2250889	PLTP	chr20_46013767_G_C_b38	0.00000000000075
		PLTP	chr20_46013767_G_C_b38	0.000000000062
		PLTP	chr20_46013767_G_C_b38	0.000000000068
		PCIF1	chr20_46013767_G_C_b38	0.000065

	<i>NEURL2</i>	chr20_46013767_G_C_b38	0.00012
20 rs17577	<i>SLC12A5</i>	chr20_46014472_G_A_b38	2.1E-30
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	5.9E-30
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	8.00E-24
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000000000000042
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000000000057
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000000000019
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000000000059
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000000000018
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.000000000034
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000000031
	<i>PLTP</i>	chr20_46014472_G_A_b38	0.00000026
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.00000033
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.00000072
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000011
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000062
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.0000064
	<i>PLTP</i>	chr20_46014472_G_A_b38	0.000011
	<i>SLC12A5</i>	chr20_46014472_G_A_b38	0.000011
	<i>SYS1</i>	chr20_46014472_G_A_b38	0.000034
	<i>SNX21</i>	chr20_46014472_G_A_b38	0.000046
	<i>RPL13P2</i>	chr20_46014472_G_A_b38	0.000057
	<i>DNTTIP1</i>	chr20_46014472_G_A_b38	0.00006
	<i>PLTP</i>	chr20_46014472_G_A_b38	0.000062
	<i>MMP9</i>	chr20_46014472_G_A_b38	0.00008
	<i>RP11-465L10.10</i>	chr20_46014472_G_A_b38	0.00013

NES	Tissue
0.24	Whole Blood
-0.17	Skin - Sun Exposed (Lower leg)
-0.19	Skin - Not Sun Exposed (Suprapubic)
0.17	Whole Blood
-0.15	Adipose - Subcutaneous
-0.44	Liver
-0.17	Muscle - Skeletal
-0.66	Cells - Cultured fibroblasts
-0.52	Thyroid
-0.42	Lung
-0.58	Heart - Atrial Appendage
-0.45	Adipose - Visceral (Omentum)
-0.46	Heart - Left Ventricle
-0.36	Nerve - Tibial
-0.32	Esophagus - Muscularis
-0.35	Artery - Aorta
-0.28	Adipose - Subcutaneous
-0.22	Artery - Tibial
-0.19	Lung
-0.3	Esophagus - Gastroesophageal Junction
-0.28	Breast - Mammary Tissue
-0.15	Testis
0.28	Testis
0.31	Cells - Transformed fibroblasts
0.3	Heart - Left Ventricle
0.27	Artery - Aorta
0.64	Lung
0.72	Adipose - Subcutaneous
0.75	Adipose - Visceral (Omentum)
0.7	Breast - Mammary Tissue
0.67	Artery - Aorta
0.79	Artery - Coronary
0.48	Thyroid
0.69	Spleen
0.43	Nerve - Tibial
0.41	Skin - Sun Exposed (Lower leg)
0.46	Esophagus - Muscularis
-0.31	Heart - Atrial Appendage

0.38	Artery - Tibial
-0.24	Lung
-0.49	Adrenal Gland
0.41	Skin - Not Sun Exposed (Suprapubic)
-0.47	Testis
-0.25	Cells - Cultured fibroblasts
0.17	Muscle - Skeletal
0.63	Small Intestine - Terminal Ileum
-0.31	Thyroid
-0.19	Esophagus - Muscularis
-0.31	Pituitary
0.38	Colon - Transverse
-0.17	Artery - Tibial
0.35	Testis
-0.16	Artery - Tibial
-0.27	Skin - Sun Exposed (Lower leg)
-0.12	Whole Blood
-0.17	Thyroid
-0.25	Artery - Tibial
-0.18	Nerve - Tibial
-0.52	Adrenal Gland
-0.25	Lung
-0.28	Colon - Sigmoid
-0.26	Adipose - Subcutaneous
-0.23	Cells - Cultured fibroblasts
-0.17	Adipose - Subcutaneous
-0.21	Adipose - Subcutaneous
-0.24	Adipose - Visceral (Omentum)
-0.24	Adipose - Visceral (Omentum)
0.12	Skin - Not Sun Exposed (Suprapubic)
-0.18	Nerve - Tibial
-0.15	Artery - Tibial
-0.15	Adipose - Visceral (Omentum)
-0.22	Lung
0.098	Whole Blood
-0.16	Thyroid
0.26	Skin - Not Sun Exposed (Suprapubic)
-0.41	Adrenal Gland
-0.25	Adipose - Visceral (Omentum)
-0.21	Heart - Left Ventricle
-0.22	Adipose - Visceral (Omentum)
-0.22	Lung
-0.17	Colon - Transverse
-0.12	Muscle - Skeletal
-0.28	Colon - Sigmoid
-0.2	Thyroid

0.31	Adrenal Gland
-0.22	Pituitary
0.19	Adipose - Visceral (Omentum)
-0.19	Heart - Atrial Appendage
0.15	Skin - Sun Exposed (Lower leg)
-0.14	Spleen
0.26	Testis
-0.12	Artery - Tibial
-0.22	Colon - Transverse
-0.15	Artery - Aorta
0.15	Adipose - Subcutaneous
-0.13	Esophagus - Muscularis
-0.18	Artery - Tibial
-0.24	Heart - Atrial Appendage
-0.049	Whole Blood
0.1	Muscle - Skeletal
0.14	Skin - Sun Exposed (Lower leg)
-0.19	Nerve - Tibial
-0.27	Lung
-0.49	Adrenal Gland
-0.26	Adipose - Subcutaneous
-0.28	Colon - Sigmoid
-0.17	Adipose - Subcutaneous
-0.23	Adipose - Subcutaneous
-0.25	Adipose - Visceral (Omentum)
-0.2	Nerve - Tibial
-0.26	Adipose - Visceral (Omentum)
-0.17	Adipose - Visceral (Omentum)
-0.16	Artery - Tibial
-0.22	Cells - Cultured fibroblasts
-0.24	Adipose - Visceral (Omentum)
-0.17	Thyroid
-0.23	Lung
-0.26	Adipose - Visceral (Omentum)
-0.24	Lung
-0.22	Heart - Left Ventricle
-0.13	Muscle - Skeletal
-0.22	Thyroid
-0.42	Adrenal Gland
-0.18	Colon - Transverse
0.11	Skin - Not Sun Exposed (Suprapubic)
-0.18	Artery - Aorta
-0.21	Heart - Atrial Appendage
-0.15	Esophagus - Muscularis
-0.25	Adrenal Gland
-0.28	Colon - Sigmoid

0.088	Whole Blood
0.31	Adrenal Gland
-0.22	Pituitary
-0.23	Colon - Transverse
-0.26	Heart - Atrial Appendage
-0.25	Esophagus - Gastroesophageal Junction
0.19	Lung
-0.22	Artery - Aorta
0.21	Skin - Not Sun Exposed (Suprapubic)
0.15	Skin - Sun Exposed (Lower leg)
-0.18	Skin - Sun Exposed (Lower leg)
0.17	Adipose - Visceral (Omentum)
-0.23	Esophagus - Gastroesophageal Junction
-0.18	Artery - Tibial
0.14	Adipose - Subcutaneous
-0.12	Artery - Tibial
-0.18	Nerve - Tibial
0.2	Adipose - Subcutaneous
-0.31	Adipose - Subcutaneous
-0.32	Adipose - Visceral (Omentum)
-0.32	Adipose - Visceral (Omentum)
-0.4	Adipose - Visceral (Omentum)
-0.33	Adipose - Visceral (Omentum)
-0.23	Adipose - Subcutaneous
0.12	Whole Blood
-0.22	Lung
-0.28	Adipose - Visceral (Omentum)
-0.2	Nerve - Tibial
-0.31	Adrenal Gland
-0.24	Lung
-0.5	Vagina
-0.23	Esophagus - Muscularis
-0.26	Adipose - Subcutaneous
-0.14	Adipose - Subcutaneous
0.18	Adipose - Subcutaneous
-0.22	Lung
-0.14	Brain - Frontal Cortex (BA9)
-0.22	Colon - Sigmoid
-0.17	Artery - Aorta
0.17	Skin - Sun Exposed (Lower leg)
0.1	Skin - Not Sun Exposed (Suprapubic)
0.49	Esophagus - Mucosa
0.42	Skin - Sun Exposed (Lower leg)
0.45	Skin - Not Sun Exposed (Suprapubic)
-0.12	Whole Blood

0.35	Nerve - Tibial
0.69	Lung
0.79	Adipose - Subcutaneous
0.76	Adipose - Visceral (Omentum)
0.75	Breast - Mammary Tissue
0.75	Spleen
0.68	Artery - Aorta
0.79	Artery - Coronary
0.48	Thyroid
0.46	Nerve - Tibial
0.41	Skin - Sun Exposed (Lower leg)
-0.31	Heart - Atrial Appendage
0.38	Artery - Tibial
0.45	Colon - Transverse
0.43	Esophagus - Muscularis
0.39	Skin - Not Sun Exposed (Suprapubic)
0.86	Uterus
-0.23	Lung
0.63	Small Intestine - Terminal Ileum
-0.13	Whole Blood
0.15	Muscle - Skeletal
-0.42	Testis
-0.17	Artery - Tibial
-0.18	Esophagus - Muscularis
0.35	Testis
-0.27	Skin - Not Sun Exposed (Suprapubic)