

**Table S8: Molecular functions regulated genes**

Up Mela1 MS/MA fold	Receptor	Other receptor	Up SLM8 MS/MA fold	Receptor	Other receptor	Up Mela1 MS/MA fold	Membrane-bound signaling	Up SLM8 MS/MA fold	Membrane-bound signaling
6.83	DNER		5.45	LOXL3	LOXL3	6.83	DNER	3.82	CNIH3
5.40	PLXNC1		4.52	LGI3		5.05	JAG1	3.35	CUBN
5.05	JAG1		3.35	CUBN	CUBN	4.75	DLL3	2.53	SEMA3D
4.94	EPHA3		3.22	LOX	LOX	4.05	TSPAN12	1.80	CD82
4.75	DLL3		3.14	OLFML3		2.82	CNIH3	1.59	DLL3
4.37	RORB		2.41	UNC13A	UNC13A	2.07	SEMA5A	1.35	JAG1
4.31	CHRNA6		2.22	TRPM3		2.02	CRB1	1.26	TSPAN5
3.30	TNFRSF19		2.12	FCER1G		No. genes >1.5	7	No. genes >1.5	5
3.21	ERBB4		2.08	RORA		1.5> no. >1.2	0	1.5> no. >1.2	2
2.88	LPHN2		2.07	IL27RA		Total	7	Total	7
2.78	SORCS1	SORCS1	2.05	KDR					
2.75	MET		2.02	PRELP		Down Mela1 MS/MA fold	Membrane-bound signaling	Down SLM8 MS/MA fold	Membrane-bound signaling
2.74	UNC13A	UNC13A	1.99	EPHA2		2.50	SEMA3A		
2.71	LPHN3		1.88	CHRNA6		1.62	NOTCH2	No. genes >1.5	0
2.55	P2RX7		1.87	ITPR1		No. genes >1.5	2	1.5> no. >1.2	0
2.38	IL6R		1.85	LPHN2		1.5> no. >1.2	0	Total	0
2.26	SORL1	SORL1	1.80	PTPRO	PTPRO	Total	2		
2.25	PTPRZ1	PTPRZ1	1.76	LDLR	LDLR				
2.21	OGFRL1	OGFRL1	1.70	VLDLR	VLDLR				
2.19	ROBO2		1.70	LOXL2	LOXL2				
2.12	P2RY1		1.64	LRP1	LRP1				
2.09	KIT		1.63	FGFR1					
2.02	CRB1		1.61	SORL1	SORL1				
1.76	ERBB3		1.59	LUM					
1.71	GRINA		1.59	P2RX7					
1.62	EPHA4		1.59	DLL3					
1.60	GPR124		1.54	TNFRSF1					
1.58	PRSS12	PRSS12	1.53	LDLRAD3	LDLRAD3				
1.43	MERTK		1.52	SEZ6L2	SEZ6L2				
No. genes >1.5	28	6	1.50	PTPRJ	PTPRJ				
1.5>nb>1.2	1	0	1.50	PTPRM	PTPRM				
Total	29	6	1.48	LRP6	LRP6				
			1.45	LENG8					
			1.40	SORCS1	SORCS1				
			1.39	NEO1	NEO1				
			1.37	PLXNC1					
			1.35	JAG1					
			1.34	IRAK3					
			No. genes >1.5	31	14				
			1.5>no.>1.2	7	3				
			Total	38	17				
			Down SLM8 MS/MA fold	Receptor	Other receptor				
			9.89	TF					
			2.78	TRPM1					
			2.40	LOXL4	LOXL4				
			2.34	GPRC5B					
			2.34	LRP2	LRP2				
			1.82	KREMEN1	KREMEN1				
			1.29	RORB					
			nb genes >1,5	6	3				
			1,5>nb>1,2	1	0				
			total	7	3				
Down Mela1 MS/MA fold	Receptor	Other receptor							
2.12	SORT1	SORT1							
2.00	TFRC	TFRC							
1.68	SLC20A1								
1.62	NOTCH2								
1.51	RARB								
1.47	IFNGR1								
1.34	LRIG2								
1.27	LRPPRC								
No. genes >1.5	5	2							
1.5>no.>1.2	3	0							
Total	8	2							