

Supplementary Table 2. The elements of the identified pathways through MAGENTA

Database	Gene_Set	Gene_Symbol	Entrez_ID	Gene_p-value	Gene_Chrom_Num	Gene_Size_kb	Best_SNP_Chrom_Num	Best_SNP_Z	Best_SNP_pval
BIOCARTA	MTOR	AKT1	207	6.01E-01	14	26	14	1.8595	6.30E-02
BIOCARTA	MTOR	EIF4A1	1973	8.17E-02	17	6	17	2.9134	3.58E-03
BIOCARTA	MTOR	EIF4A2	1974	6.38E-01	3	6	3	2.3595	1.83E-02
BIOCARTA	MTOR	EIF4B	1975	1.33E-02	12	36	12	3.5472	3.89E-04
BIOCARTA	MTOR	EIF4E	1977	4.28E-01	4	52	4	2.3014	2.14E-02
BIOCARTA	MTOR	EIF4EBP1	1978	9.21E-01	8	30	8	0.9996	3.18E-01
BIOCARTA	MTOR	EIF4G1	1981	4.72E-02	3	21	3	3.113	1.85E-03
BIOCARTA	MTOR	EIF4G2	1982	2.35E-02	11	12	11	3.3796	7.26E-04
BIOCARTA	MTOR	FKBP1A	2280	7.74E-01	20	24	20	2.0784	3.77E-02
BIOCARTA	MTOR	MTOR	2475	2.58E-01	1	156	1	2.6841	7.27E-03
BIOCARTA	MTOR	PDK2	5164	4.62E-02	17	17	17	3.0381	2.38E-03
BIOCARTA	MTOR	PDPK1	5170	8.17E-01	16	65	16	1.3404	1.80E-01
BIOCARTA	MTOR	PIK3CA	5290	3.70E-01	3	86	3	2.4703	1.35E-02
BIOCARTA	MTOR	PIK3R1	5295	7.70E-02	5	75	5	3.1693	1.53E-03
BIOCARTA	MTOR	PPP2CA	5515	3.69E-01	5	30	5	2.3303	1.98E-02
BIOCARTA	MTOR	PTEN	5728	7.37E-02	10	105	10	3.0666	2.17E-03
BIOCARTA	MTOR	RPS6	6194	7.62E-02	9	4	9	3.1068	1.89E-03
BIOCARTA	MTOR	RPS6KB1	6198	1.95E-01	17	57	17	2.5744	1.00E-02
BIOCARTA	MTOR	TSC1	7248	2.82E-02	9	53	9	3.5264	4.21E-04
BIOCARTA	MTOR	TSC2	7249	8.82E-01	16	41	16	1.3751	1.69E-01
BIOCARTA	MTOR	MKNK1	8569	9.16E-01	1	47	1	1.5514	1.21E-01
BIOCARTA	MTOR	EIF3A	8661	2.48E-01	10	46	10	2.7167	6.59E-03
BIOCARTA	MTOR	EIF4G3	8672	3.29E-01	1	371	1	2.673	7.52E-03
Database	Gene_Set	Gene_Symbol	Entrez_ID	Gene_p-value	Gene_Chrom_Num	Gene_Size_kb	Best_SNP_Chrom_Num	Best_SNP_Z	Best_SNP_pval
BIOCARTA	CTCF	CD79A	973	7.67E-02	19	4	19	2.8427	4.47E-03
BIOCARTA	CTCF	CD79B	974	2.73E-01	17	4	17	2.4708	1.35E-02
BIOCARTA	CTCF	CDKN1B	1027	3.92E-02	12	5	12	3.371	7.49E-04
BIOCARTA	CTCF	CDKN2A	1029	8.80E-01	9	27	9	1.5452	1.22E-01
BIOCARTA	CTCF	MTOR	2475	2.58E-01	1	156	1	2.6841	7.27E-03

BIOCARTA	CTCF	SMAD1	4086	4.90E-01	4	77	4	2.3723	1.77E-02
BIOCARTA	CTCF	SMAD4	4089	6.19E-01	18	55	18	1.9095	5.62E-02
BIOCARTA	CTCF	SMAD5	4090	6.71E-02	5	50	5	3.1973	1.39E-03
BIOCARTA	CTCF	MDM2	4193	1.26E-01	12	37	12	2.8858	3.90E-03
BIOCARTA	CTCF	MYC	4609	5.77E-02	8	5	8	3.1893	1.43E-03
BIOCARTA	CTCF	PIK3CA	5290	3.70E-01	3	86	3	2.4703	1.35E-02
BIOCARTA	CTCF	PIK3CG	5294	2.78E-02	7	42	7	3.4234	6.18E-04
BIOCARTA	CTCF	PIK3R1	5295	7.70E-02	5	75	5	3.1693	1.53E-03
BIOCARTA	CTCF	PPP2CA	5515	3.69E-01	5	30	5	2.3303	1.98E-02
BIOCARTA	CTCF	PTEN	5728	7.37E-02	10	105	10	3.0666	2.17E-03
BIOCARTA	CTCF	RPS6KB1	6198	1.95E-01	17	57	17	2.5744	1.00E-02
BIOCARTA	CTCF	TGFB1	7040	8.52E-02	19	23	19	2.9952	2.74E-03
BIOCARTA	CTCF	TGFB2	7042	3.08E-01	1	99	1	2.6736	7.51E-03
BIOCARTA	CTCF	TGFB3	7043	2.45E-01	14	24	14	2.6761	7.45E-03
BIOCARTA	CTCF	TGFBR1	7046	8.50E-02	9	49	9	3.1528	1.62E-03
BIOCARTA	CTCF	TGFBR2	7048	7.87E-01	3	88	3	2.1704	3.00E-02
BIOCARTA	CTCF	TGFBR3	7049	3.51E-01	1	226	1	2.8564	4.29E-03
BIOCARTA	CTCF	TP53	7157	5.46E-01	17	19	17	2.1342	3.28E-02