

Supplementary 1.

Summary of the GO and biological pathway analyses of the predicted microRNA targets for the DELs shared between the TRAIT vs. CON and MAJOR vs. CON comparisons.

Analysis	Name	ID	Adjusted <i>p</i> -value
GO:BP	miRNA-mediated post-transcriptional gene silencing	GO:0035195	4,87E-21
GO:BP	regulatory ncRNA-mediated post-transcriptional gene silencing	GO:0035194	4,87E-21
GO:BP	post-transcriptional gene silencing	GO:0016441	4,87E-21
GO:BP	regulatory ncRNA-mediated gene silencing	GO:0031047	1,33E-20
GO:BP	post-transcriptional regulation of gene expression	GO:0010608	1,10E-17
GO:BP	negative regulation of gene expression	GO:0010629	4,40E-15
GO:BP	negative regulation of macromolecule biosynthetic process	GO:0010558	9,62E-12
GO:BP	negative regulation of biosynthetic process	GO:0009890	1,19E-11
GO:BP	negative regulation of macromolecule metabolic process	GO:0010605	6,25E-11
GO:BP	negative regulation of metabolic process	GO:0009892	1,52E-10
GO:BP	regulation of gene expression	GO:0010468	1,63E-07
GO:BP	regulation of macromolecule biosynthetic process	GO:0010556	1,94E-07
GO:BP	negative regulation of cellular process	GO:0048523	1,94E-07
GO:BP	regulation of biosynthetic process	GO:0009889	2,64E-07
GO:BP	negative regulation of biological process	GO:0048519	2,94E-07
GO:BP	regulation of macromolecule metabolic process	GO:0060255	1,34E-06
GO:BP	regulation of metabolic process	GO:0019222	4,03E-06
GO:BP	gene expression	GO:0010467	1,73E-04
GO:BP	macromolecule biosynthetic process	GO:0009059	3,21E-04
GO:BP	regulation of cellular process	GO:0050794	4,20E-04
GO:BP	regulation of biological process	GO:0050789	6,81E-04
GO:BP	biological regulation	GO:0065007	1,08E-03
GO:BP	biosynthetic process	GO:0009058	1,09E-03
GO:BP	macromolecule metabolic process	GO:0043170	5,96E-03
GO:CC	RISC complex	GO:0016442	2,25E-17
GO:CC	RNAi effector complex	GO:0031332	2,25E-17
GO:CC	ribonucleoprotein complex	GO:1990904	1,43E-09
GO:CC	protein-containing complex	GO:0032991	4,01E-05
KEGG	MicroRNAs in cancer	KEGG:05206	2,55E-05
WP	miRNAs involved in DNA damage response	WP:WP1545	5,36E-04
WP	2q21.1 copy number variation syndrome	WP:WP5223	9,27E-03

Supplementary 2.

Summary of the GO and biological pathway analyses of the predicted microRNA targets for the DELs specific to MAJOR individuals.

Analysis	Name	ID	Adjusted <i>p</i> -value
GO:BP	post-transcriptional gene silencing	GO:0016441	1,20E-16
GO:BP	miRNA-mediated post-transcriptional gene silencing	GO:0035195	1,20E-16
GO:BP	regulatory ncRNA-mediated post-transcriptional gene silencing	GO:0035194	1,20E-16
GO:BP	regulatory ncRNA-mediated gene silencing	GO:0031047	2,52E-16
GO:BP	post-transcriptional regulation of gene expression	GO:0010608	5,14E-14
GO:BP	negative regulation of gene expression	GO:0010629	5,93E-12
GO:BP	negative regulation of macromolecule biosynthetic process	GO:0010558	2,66E-09
GO:BP	negative regulation of biosynthetic process	GO:0009890	3,08E-09
GO:BP	negative regulation of macromolecule metabolic process	GO:0010605	1,12E-08
GO:BP	negative regulation of metabolic process	GO:0009892	2,23E-08
GO:BP	regulation of gene expression	GO:0010468	5,68E-06
GO:BP	regulation of macromolecule biosynthetic process	GO:0010556	6,32E-06
GO:BP	negative regulation of cellular process	GO:0048523	6,32E-06
GO:BP	regulation of biosynthetic process	GO:0009889	7,96E-06
GO:BP	negative regulation of biological process	GO:0048519	8,54E-06
GO:BP	regulation of macromolecule metabolic process	GO:0060255	2,82E-05
GO:BP	regulation of metabolic process	GO:0019222	6,67E-05
GO:BP	gene expression	GO:0010467	1,30E-03
GO:BP	regulation of cellular process	GO:0050794	1,89E-03
GO:BP	macromolecule biosynthetic process	GO:0009059	1,99E-03
GO:BP	regulation of biological process	GO:0050789	2,63E-03
GO:BP	biological regulation	GO:0065007	3,78E-03
GO:BP	biosynthetic process	GO:0009058	5,30E-03
GO:BP	macromolecule metabolic process	GO:0043170	1,99E-02
GO:CC	RISC complex	GO:0016442	5,87E-14
GO:CC	RNAi effector complex	GO:0031332	5,87E-14
GO:CC	ribonucleoprotein complex	GO:1990904	9,33E-08
GO:CC	protein-containing complex	GO:0032991	3,18E-04
KEGG	MicroRNAs in cancer	KEGG:05206	4,62E-08
WP	miRNAs involved in DNA damage response	WP:WP1545	1,77E-03
WP	Cell differentiation expanded index	WP:WP2023	1,77E-03
WP	Glial cell differentiation	WP:WP2276	9,16E-03
WP	Cell differentiation index	WP:WP2029	1,44E-02
WP	2q21 1 copy number variation syndrome	WP:WP5223	1,44E-02