

Supplemental Table S1. Rare-Variant Analysis Using SNP-SKAT and Burden Test Using FARVAT

CHR	Gene	No. of variant	MAC	Start	End	<i>P</i> value
FARVAT-SKAT test						
1	AGO4	2	34	35,828,470	35,858,557	0.00012
4	ABCG2	25	2,338	88,099,351	88,255,662	0.00039
FARVAT-Burden test						
10	ECHDC3	11	2,368	11,750,665	11,808,191	0.00011
2	ANTXR1	35	10,243	69,031,924	69,315,592	0.00016
1	AGO4	2	34	35,828,470	35,858,557	0.00029
3	ROBO2	79	9,125	77,048,001	78,014,395	0.00045

SNP, single nucleotide polymorphism; SKAT, Set (Sequence) Kernel Association Test; FARVAT, family-based rare variant association test; CHR, chromosome; MAC, minor allele count; *AGO4*, argonaute RISC component 4; *ABCG2*, ATP-binding cassette subfamily G member 2; *ECHDC3*, enoyl-CoA hydratase domain containing 3; *ANTXR1*, anthrax toxin receptor 1; *ROBO2*, roundabout guidance receptor 2.