

S4 Table. Gene ontology analysis for identified significant SNPs for the risk of NB using Database for Annotation, Visualization, and Integrated Discovery (DAVID)

| GO ID | GO term | p-value | Corrected p-value | Associated gene |
|------------|---------------------------------------------------------------------|---------|-------------------|----------------------------------------------|
| GO:0005319 | Lipid transporter activity | 0.0004 | 0.01 | <i>SETX, TAP2, WRN</i> |
| GO:0060993 | Kidney morphogenesis | 0.0006 | 0.02 | <i>EFNA5, PTPRD, SPARCL1</i> |
| GO:0010743 | Regulation of macrophage derived foam cell differentiation | 0.0007 | 0.02 | <i>ASPM, LEF1, LRRK2</i> |
| GO:0010744 | Positive regulation of macrophage derived foam cell differentiation | 0.0008 | 0.02 | <i>CSF1, HEXB, PDCD6IP, SYNE2</i> |
| GO:0050909 | Sensory perception of taste | 0.001 | 0.03 | <i>AGT, PDCD6IP, SETX</i> |
| GO:0051782 | Negative regulation of cell division | 0.001 | 0.03 | <i>ALDH1L1, ASPM, GAD2</i> |
| GO:0090077 | Foam cell differentiation | 0.002 | 0.04 | <i>AGT, ASPM, NOL6, NRAP, PPARA</i> |
| GO:0010742 | Macrophage derived foam cell differentiation | 0.002 | 0.04 | <i>HEXB, LRRK2, TMEM199</i> |
| GO:0043649 | Dicarboxylic acid catabolic process | 0.002 | 0.05 | <i>HEXB, LRRK2, TMEM199</i> |
| GO:0099560 | Synaptic membrane adhesion | 0.002 | 0.05 | <i>ASPM, PTCH1, WRN</i> |
| GO:0085029 | Extracellular matrix assembly | 0.00 | 0.06 | <i>LEF1, PTCH1, TAS2R42, TNFRSF14, TRPM5</i> |
| GO:0097306 | Cellular response to alcohol | 0.01 | 0.11 | <i>ANK1, DLG2, PDCD6IP</i> |
| GO:0055013 | Cardiac muscle cell development | 0.01 | 0.11 | <i>ANK1, DLG2, PDCD6IP</i> |
| GO:0008347 | Glial cell migration | 0.01 | 0.10 | <i>CHST11, HEXB, VCAN</i> |
| GO:0010611 | Regulation of cardiac muscle hypertrophy | 0.01 | 0.10 | <i>CHST11, HEXB, VCAN</i> |
| GO:0014743 | Regulation of muscle hypertrophy | 0.01 | 0.11 | <i>ANK1, DLG2, PDCD6IP</i> |
| GO:0030204 | Chondroitin sulfate metabolic process | 0.01 | 0.15 | <i>AGT, APOB, CSF1</i> |
| GO:0072078 | Nephron tubule morphogenesis | 0.01 | 0.15 | <i>AGT, IHH, SMAD3</i> |
| GO:0072088 | Nephron epithelium morphogenesis | 0.01 | 0.15 | <i>AGT, PARP1, PPARA, SMAD3</i> |
| GO:0072028 | Nephron morphogenesis | 0.01 | 0.15 | <i>AGT, APOB, CSF1, PPARA</i> |
| GO:0061333 | Renal tubule morphogenesis | 0.01 | 0.15 | <i>AGT, APOB, CSF1, PPARA</i> |
| GO:0045332 | Phospholipid translocation | 0.01 | 0.14 | <i>AGT, LAMA5, PTCH1</i> |
| GO:0050654 | Chondroitin sulfate proteoglycan metabolic process | 0.01 | 0.14 | <i>ANO7, ATP10D, ATP8B3</i> |
| GO:0034204 | Lipid translocation | 0.01 | 0.13 | <i>ANO7, ATP10D, ATP8B3</i> |

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|------------|------------------------------------------------------------------------|------|------|-------------------------------------------------------------------|
| GO:0097035 | Regulation of membrane lipid distribution | 0.02 | 0.15 | <i>AGT, APOB, CSF1, PPARA</i> |
| GO:0045197 | Establishment or maintenance of epithelial cell apical/basal polarity | 0.02 | 0.16 | <i>AGT, PARP1, PPARA, SMAD3</i> |
| GO:0038179 | Neurotrophin signaling pathway | 0.02 | 0.14 | <i>AGT, FRAS1, LAMA5, LRRK2, PTCH1, WNK4</i> |
| GO:0051646 | Mitochondrion localization | 0.02 | 0.14 | <i>AGT, LAMA5, PTCH1, WNK4</i> |
| GO:0050912 | Detection of chemical stimulus involved in sensory perception of taste | 0.02 | 0.14 | <i>AGT, LAMA5, PTCH1, WNK4</i> |
| GO:0061245 | Establishment or maintenance of bipolar cell polarity | 0.02 | 0.14 | <i>AGT, LAMA5, PTCH1, WNK4</i> |
| GO:0035088 | Establishment or maintenance of apical/basal cell polarity | 0.02 | 0.14 | <i>AGT, LAMA5, PTCH1, WNK4</i> |
| GO:0003678 | DNA helicase activity | 0.03 | 0.13 | <i>ABCA10, ABCA6, AKR1C4, ANO7, APOB, ATP10D, ATP8B3, SLC27A4</i> |
| GO:0001658 | Branching involved in ureteric bud morphogenesis | 0.03 | 0.11 | <i>ANO7, ATP10D, ATP8B3</i> |
| GO:0080171 | Lytic vacuole organization | 0.03 | 0.09 | <i>PTCH1, TAS2R42, TNFRSF14</i> |
| GO:0007040 | Lysosome organization | 0.03 | 0.09 | <i>CEMIP, HEXB, VCAN</i> |
| GO:0007405 | Neuroblast proliferation | 0.03 | 0.06 | <i>EFNA5, MAP4K1, PTCH1, UGGT1, WRN</i> |
| GO:0006027 | Glycosaminoglycan catabolic process | 0.03 | 0.06 | <i>BRAT1, LRRK2, SETX</i> |

SNP, single nucleotide polymorphism; NB, neuroblastoma.