

**Supplemental Table S2.** Retinoic Acid-Dependent Signaling Network Candidate Genes.

Gene	Signaling Pathway Involved
<i>ABCA1</i>	Cholesterol Metabolism/SHH
<i>ADAMTSL2</i>	TGF-Beta protein storage
<i>ADDUCIN</i>	Rho Kinase Signaling
<i>APOE</i>	Cholesterol Metabolism/SHH
<i>AXINI</i>	WNT Signaling
<i>AXIN2</i>	WNT Signaling
<i>BMP2</i>	SMAD Signaling
<i>BMP4</i>	SMAD Signaling
<i>CAMK</i> genes	Ca <sup>2+</sup> Dependent Signaling
<i>CAV</i> genes	ERK/Cholesterol Dependent Signaling
<i>CELSR</i>	PCP WNT Signaling
<i>CTNNB1</i>	Canonical WNT Signaling
<i>CYP51</i>	Cholesterol Metabolism/SHH
<i>DAAM</i> genes	Wnt signaling
<i>DVL</i> genes	WNT signaling
<i>EGF</i>	MAPK/EGF
<i>EGFR</i> genes	MAPK/EGF
<i>ENOS</i> genes	Rho Kinase Signaling
<i>EPAC</i> genes	Rho Kinase Signaling
<i>FDFT1</i>	Cholesterol Metabolism/SHH
<i>FDPS</i>	Cholesterol Metabolism/SHH
<i>FGF8</i>	MAPK/FGF
<i>FGFR</i> genes	MAPK/FGF
<i>FZD</i> genes	Wnt signaling
<i>GLI1</i>	SHH pathway
<i>GLI2</i>	SHH pathway
<i>GLI3</i>	SHH pathway
<i>GSK3B</i>	WNT signaling
<i>HMGCR</i>	Cholesterol Metabolism/SHH
<i>HOXA1</i>	Hox Signaling
<i>HOXA2</i>	Hox Signaling
<i>HOXB1</i>	Hox Signaling
<i>HOXB2</i>	Hox Signaling
<i>IDII</i>	Cholesterol Metabolism/SHH
<i>IHH</i>	SHH signaling
<i>INSIG1</i>	Cholesterol Metabolism/SHH
<i>INSIG2</i>	Cholesterol Metabolism/SHH
<i>L1CAM</i>	RasMAPK Signaling
<i>LSS</i>	Cholesterol Metabolism/SHH
<i>MAP2K1</i>	RasMAPK Signaling
<i>MAP2K2</i>	RasMAPK Signaling
<i>MVD</i>	Cholesterol Metabolism/SHH

<i>MVK</i>	Cholesterol Metabolism/SHH
<i>NODAL</i>	TGF-Beta signaling
<i>NOTCH genes</i>	NOTCH signaling
<i>NSDHL</i>	Cholesterol Metabolism/SHH
<i>PEX11B</i>	Cholesterol Metabolism/SHH
<i>PEX14</i>	Cholesterol Metabolism/SHH
<i>PEX19</i>	Cholesterol Metabolism/SHH
<i>PI4KA</i>	Cholesterol Metabolism/SHH
<i>PKC</i>	Calcium Signaling
<i>PMVK</i>	Cholesterol Metabolism/SHH
<i>PRICKLE genes</i>	WNT PCP signaling
<i>PTCH genes</i>	SHH pathway
<i>RAC</i>	Cholesterol Metabolism/SHH
<i>RAP1</i>	Cholesterol Metabolism/SHH
<i>RHO kinase genes</i>	Cholesterol Metabolism/SHH
<i>ROCK genes</i>	Cholesterol Metabolism/SHH
<i>RYR genes</i>	Cholesterol Metabolism/SHH
<i>SFRP genes</i>	Calcium Signaling
<i>SHH</i>	Cholesterol Metabolism/SHH
<i>SMO</i>	WNT PCP signaling
<i>SOX10</i>	SHH pathway
<i>SQLE</i>	Cholesterol Metabolism/SHH
<i>SUFU</i>	Cholesterol Metabolism/SHH
<i>NODAL</i>	Cholesterol Metabolism/SHH
<i>NOTCH genes</i>	WNT PCP signaling
<i>NSDHL</i>	SHH pathway
<i>PI4KA</i>	Cholesterol Metabolism/SHH
<i>PKC</i>	Cholesterol Metabolism/SHH
<i>PMVK</i>	Calcium Signaling
<i>PRICKLE genes</i>	Cholesterol Metabolism/SHH
<i>PTCH genes</i>	WNT PCP signaling
<i>RAC</i>	Rho Kinase Signaling
<i>RAP1</i>	Rho Kinase Signaling
<i>RHO kinase genes</i>	Rho Kinase Signaling
<i>ROCK genes</i>	Rho Kinase Signaling
<i>RYR genes</i>	Calcium Signaling
<i>SFRP genes</i>	WNT signaling
<i>SHH</i>	SHH pathway
<i>SMO</i>	Cholesterol Metabolism/SHH
<i>SOX10</i>	TGF-beta, WNT
<i>SQLE</i>	Cholesterol Metabolism/SHH
<i>SUFU</i>	SHH signaling
<i>TAU genes</i>	Rho Kinase Signaling
<i>TGFB2</i>	SMAD Signaling
<i>VANGL genes</i>	WNT PCP signaling
<i>WNT genes</i>	WNT

