Supplementary information

November 4, 2015

Table 1: Regulatory interactions used to construct the Boolean model of gonadal sex determination.

Interaction	Species	References
Emx2→ Urogenital ridge	*Mus musculus*	[1, 2]
LHX1→ Urogenital ridge	*Homo sapiens*	[3]
LHX9 + WT1mKTS→ *NR5A1*	*Homo sapiens*	[4, 2]
PAX2→ *WT1*WT1	*Homo sapiens*	[5, 6]
PAX8→ *WT1*	*Homo sapiens*	[7]
CBX2→ *NR5A1*	*Homo sapiens*	[8]
CBX2→ *SRY*	*Homo sapiens*	[8]
CBX2→ *SOX9*	*Homo sapiens*	[8]
GATA4/FOG2 + SF1→ *AMH*	*Homo sapiens*	[9, 10, 11, 12]
GATA4 + FOG2→ *SRY*	*Homo sapiens*	[13, 14]
GATA4 + WT1pKTS→ *SRY*	*Homo sapiens*	[15]
Gata4→ *Wnt4*	*Mus musculus*	[16]
WT1mKTS→ *NR5A1*	*Homo sapiens*	[17, 4]
WT1mKTS→ *NR0B1*	*Homo sapiens*	[18]
WT1mKTS→ *SRY*	*Homo sapiens*	[19, 20]
WT1mKTS + SF1→ *AMH*	*Homo sapiens*	[19, 17, 15]
WT1mKTS + SF1→ *SRY*	*Homo sapiens*	[21, 22, 23]
SF1→ *NR0B1*	*Homo sapiens*	[24, 25, 26, 27]
DAX1⊣ *SF1*	*Homo sapiens*	[24, 28, 29]
DAX1⊣ SF1 + GATA4 + WT1 → *AMH*	*Homo sapiens*	[30, 17]
SRY+SF1→ *SOX9*	*Homo sapiens*	[31, 32]
SRY→ *SOX9*	*Homo sapiens*	[31, 32]
SRY⊣ β-catenin	*Homo sapiens*	[33]
Sox9→ *Sry*	*Mus musculus*	[34, 35]
Sox9→ *Fgf9*	*Mus musculus*	[36]
SOX9→ *PGD2*	*Homo sapiens*	[37, 38]
SOX9 + SF1→ *AMH*	*Homo sapiens*	[39, 40]
SOX9⊣ β-catenin	*Homo sapiens*	[33]
SOX9⊣ FOXL2	*Homo sapiens*	[41]
Fgf9→ *Sox9*	*Mus musculus*	[36, 42, 43]
Fgf9⊣ Wnt4	*Mus musculus*	[43]
PGD2→ *SOX9*	*Homo sapiens*	[37, 38]
Dkk1⊣ Wnt4-β-catenin	*Mus musculus*	[16]
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Continuation		
Interaction	Species	References
Dkk1⊣ Rspo1	*Mus musculus*	[16]
WNT4→ NR0B1	*Homo sapiens*	[44]
WNT4⊣ SF1	*Homo sapiens*	[45]
Wnt4⊣ Fgf9	*Mus musculus*	[43]
Wnt4⊣ Sox9	*Mus musculus*	[43]
RSPO1→ Wnt4-β-catenin	*Homo sapiens*	[46, 33]
FOXL2⊣ SF1 → CYP17	*Homo sapiens*	[47]
FOXL2⊣ SOX9	*Homo sapiens*	[41]
FOXL2⊣ DMRT1	*Homo sapiens*	[48]
β-catenin→ Foxl2	*Mus musculus*	[16]
β-catenin⊣ Sry, Sox9, Amh	*Mus musculus*	[49]

The genes and protein names were written in human an mouse according to international standard nomenclature

http://www.genenames.org/about/faq

http://www.informatics.jax.org/mgihome/nomen/gene.shtml

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