-1.0 -0.5 0.0 0.5 1.0

TGF-BETA SIGNALING PATHWAY BMP2/46 BMPRI ► Smad1/5/8 → Hepaidin Iron metabolism Activin B DNA |RMPRIJA|reii Smad4 ΗЈ۷ NEO1 HFE TfR2 TfR1 TF RGMa/b BMP2/4 BMPRI RIMPRIVACIRII Osteoblast differentiation, Smad1/5/8 neurogenesis, ventral mesoderm specification **►** ○ − \circ -Chordin BAMBI DNA DNA Smad4 **BMPRI** +p DAN BMP BMPRII Angiogenesis, extracellular matrix Transcription factors, co-activators, Ras/ MAPK ERK Growth factor neogenesis, immunosuppression, apoptosis induction and co-repressors IFNy ► Smad6/7 SIN3A $TNF\alpha$ Apoptosis Rbx1 SnoN HDAC1/2 Cul1 Smurf1/2 Ski THSD4 FBN1 NCoR1 Skpl BAMBI LTBP1 THBS1 p107 TGFB RI ►|Smad2/3 l O → c-Myc E2F4/5 TGFB TGFBRII DP1 DNA Decorin SARA Smad4 FMOD EMP3 TGIF p300 G1 arrest +u GARP Ubiquitin mediated DNA proteolysis Cell Cycle TAK1, MEKK1 DAXX/ JNK MAPK signaling pathway RhoA ► PF2A **►** р70S6K IGSF1 Lefty BAMBI Gonadal growth, embryo differentiation, ActivinRI ►|Smad2/3 **►** ○ placenta formation, etc -ActivinRII DNA FST Smad6/7 Smad4 +p Left-right axis determination ►Smad2/3 Pitx2 NodalRI Mesoderm and endoderm induction, etc Nodal ► NodalRII DNA Smad4