

Table S1. Details on antibodies used and antibody concentration for western blotting

Primary Antibody	Conc.	Manufacturer	Loading Constant	Pairing	Secondary
Axin1	1:500	Cell Signaling (#2087)	Actin	Separate	Rabbit
β -Catenin	1:500	Cell Signaling (#8480)	Actin	Separate	Rabbit
DVL2	1:500	Cell Signaling (#3224)	Actin	Separate	Rabbit
GSK3 α	1:500	Cell Signaling (#5676)	Mortalin	Together	Rabbit & Mouse
GSK3 β	1:500	Cell Signaling (#5676)	Mortalin	Together	Rabbit & Mouse
HCN1	1:500	Neuromab (75-110)	Actin	Together	Rabbit & Mouse
HCN2	1:500	Neuromab (75-111)	Actin	Together	Rabbit & Mouse
Kv4.2	1:500	Neuromab (75-016)	Actin	Together	Rabbit & Mouse
LRP6	1:500	Cell Signaling (#2560)	Mortalin	Separate	Rabbit & Mouse
Total AKT	1:500	Cell Signaling (# 9272)	Actin	Together	Rabbit
Total FMRP	1:500	Cell Signaling (#4317)	Actin	Separate	Rabbit
Phospho-AKT (S473)	1:500	Cell Signaling (#9271)	Actin	Together	Rabbit & Mouse
Phospho-FMRP (S499)	1:500	PhosphoSolutions (p1125-499)	Actin	Together	Rabbit
Phospho-S6 (S235/236)	1:500	Cell Signaling (#4858)	Actin	Together	Rabbit
Phospho-S6 (S240/244)	1:500	Cell Signaling (#2215)	Actin	Together	Rabbit
Total S6	1:500	Cell Signaling (#2217)	Actin	Together	Rabbit
Wnt3A	1:500	Cell Signaling (#2721)	Mortalin	Separate	Rabbit & Mouse
Wnt5A/B	1:500	Cell Signaling (#2530)	Mortalin	Separate	Rabbit & Mouse