

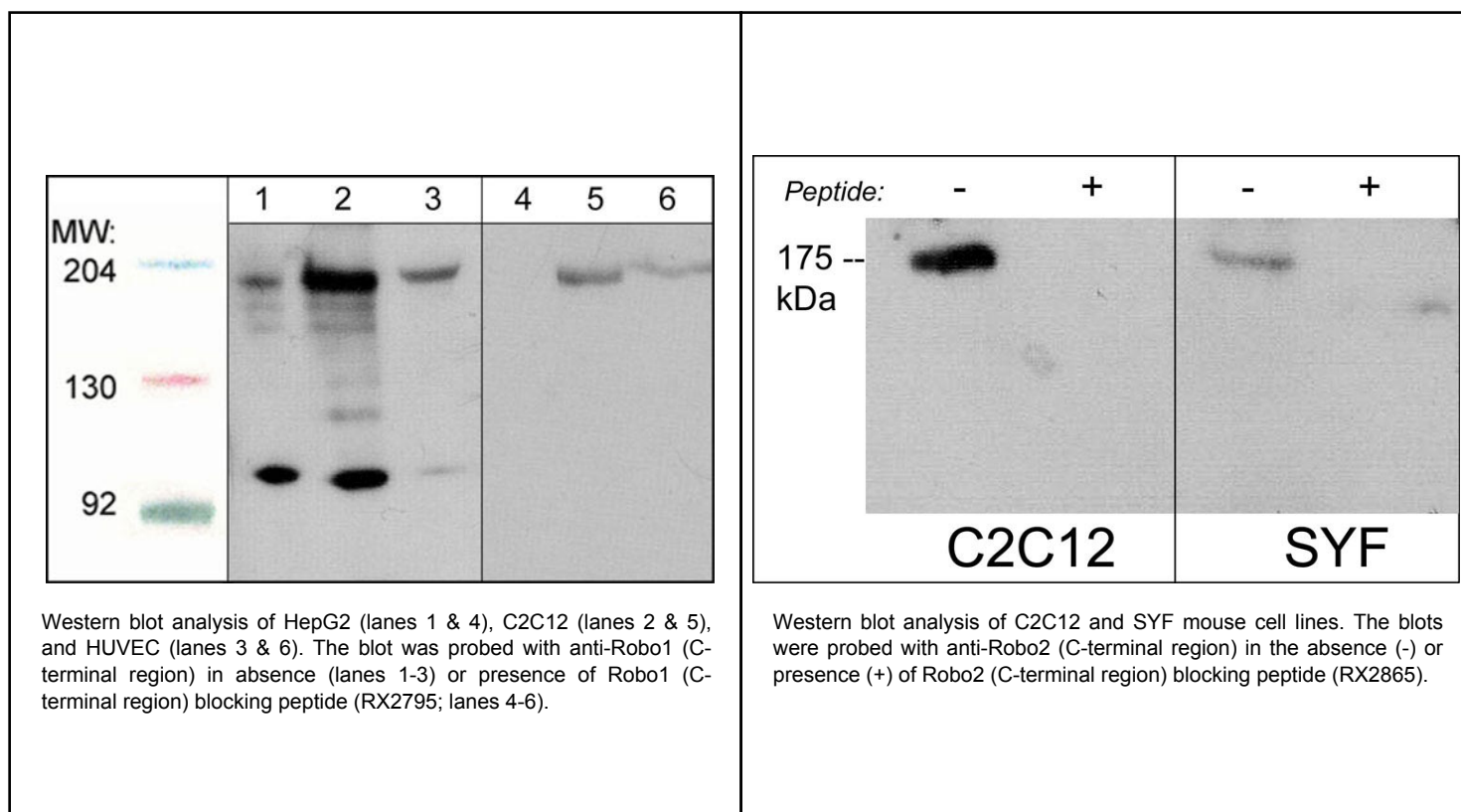
Kit Summary

The Robo antibody sampler kit can be used to detect the level of Robo1 and Robo2 expression. The kit also includes peptides for antibody blocking experiments and a secondary reagent for antibody detection.

Kit Components

Cat. #	Description	Product Type	Size	Applications	Species Reactivity	WB Dilution
RP2791	Robo1 (C-terminal region)	Rabbit pAb	50 µl	WB, E, ICC	Hu, Rt, Ms	1:500
RX2795	Robo1 (C-terminal region)	Peptide	50 µg	AB, E		
RP2861	Robo2 (C-terminal region)	Rabbit pAb	50 µl	WB, E	Hu, Rt, Ms, Ck	1:500
RX2865	Robo2 (C-terminal region)	Peptide	50 µg	AB, E		
RS3251	Anti-Rabbit Ig Light-Chain Specific:HRP	Mouse mAb	100 µl	WB, E, ICC, IHC	Rb	1:5000

Applications: WB = Western blot, E = ELISA, ICC = Immunocytochemistry, IP = Immunoprecipitation, IHC = Immunohistochemistry, FC = Flow Cytometry
Species: H = Human, R = Rat, Ms = Mouse, C = Chicken, F = Fish, Fr = Frog, Rb = Rabbit



FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Background

The Robo family of repulsive guidance receptors (Robo1-4) has important roles in controlling axon guidance and cell migration. These receptors are members of the immunoglobulin (Ig) superfamily and consist of an ectodomain with five Ig domains and three fibronectin type III repeats, a single transmembrane domain, and a long cytoplasmic tail that contains four blocks of conserved cytoplasmic sequences. In *Drosophila*, mutations in Robo, and its midline-expressed ligand Slit, result in too many axons crossing and staying at the midline. Several proteins that regulate the actin cytoskeleton, including cAbl, Ena, and Rho-family GTPases, contribute to the Robo signaling pathway. cAbl phosphorylates Robo1 at Tyr-1073, and this may inhibit Robo activity, while Slit-Robo signaling activates both Rac and Rho, and inactivates Cdc42. Thus, Robo guidance receptors control axon outgrowth and cell migration through activation of cell signaling pathways that regulate cytoskeletal dynamics.

Background References

Bashaw, G.J. et al. (2000). *Cell* 101:703.

Kidd, T. et al. (1998) *Cell* 92:205.

Buffer and Storage

Rabbit polyclonal antibodies are supplied in phosphate-buffered saline (PBS), 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. The secondary reagents are supplied in the same buffer without azide, and the peptides are supplied in PBS and 0.05% sodium azide. Store all at -20°C . Stable for 1 year.

Product Citations

Cat. # Citation & Application

RS3251 Kawasaki, H. et al. (2013) *World J Gastroenterol.* 19(17):2629. (WB, ICC: mouse intestinal myofibroblasts and

RS3251 Estrada-Bernal, A. et al. (2011) *J Neurooncol.* 102:353. (Western blot)

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.