

Robo2 (C-terminal Region)

Cat. # RP2861

Host Rabbit Polyclonal

Size 100 µl

Background:

The Robo family of repulsive guidance receptors (Robo1-4) have 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.

References

- Kidd, T. et al. (1998) *Cell* 92:205.
Bashaw, G.J. et al. (2000). *Cell* 101:703.
Yang, L. & Bashaw, G.J. (2006). *Neuron* 52:595.

Immunogen:

Robo2 synthetic peptide (coupled to carrier protein) corresponds to amino acids in the C-terminal region of human Robo2. This sequence has significant homology to the same region in rat and mouse Robo2, and has low homology to other Robo family members.

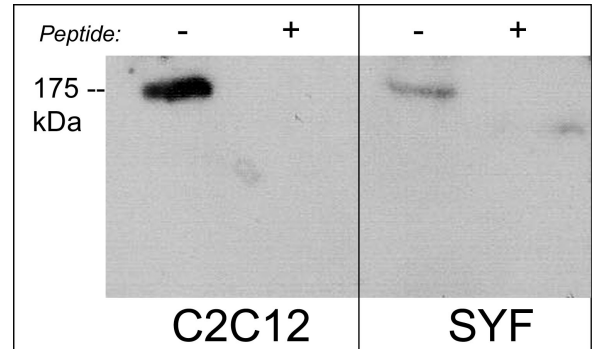
Applications:

WB 1:500
ELISA 1:2000

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Related Products:

RP2791 Robo1 (C-terminal region) Rabbit Polyclonal
PP1301 Plexin A1 (Sema Domain) Rabbit Polyclonal
NP2111 Neuropilin-1 (a1 CUB Domain) Rabbit Polyclonal
SM1881 Semaphorin-4D (C-terminal Region) Mouse Monoclonal
SP1221 Semaphorin-3A (Central Region) Rabbit Polyclonal
SP1241 Semaphorin-3A (C-terminal) Rabbit Polyclonal



Western blot analysis of C2C12 and SYF mouse cell lines. The blots were probed with anti-Robo2 (C-terminal region) in the absence (-) or presence (+) of Robo2 (C-terminal region) blocking peptide (RX2865).

Buffer and Storage:

Rabbit polyclonal, affinity-purified antibody is supplied in 100 µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

Specificity:

This antibody was affinity purified using Robo2 (C-terminal region) peptide. The purified antibody detects a 175 kDa* band corresponding to Robo2 in Western blots of mouse C2C12 and SYF cells.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

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