

### Anti-Robo1 (C-terminal region) Antibody

Catalog # AN1939

## **Specification**

## Anti-Robo1 (C-terminal region) Antibody - Product Information

Application WB
Primary Accession Q9Y6N7
Reactivity Bovine
Host Rabbit

Clonality Rabbit Polyclonal

Isotype IgG
Calculated MW 180930

## Anti-Robo1 (C-terminal region) Antibody - Additional Information

Gene ID **6091** 

Dilution WB~~1:1000

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-Robo1 (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Shipping**

Blue Ice

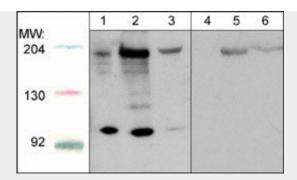
## Anti-Robo1 (C-terminal region) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

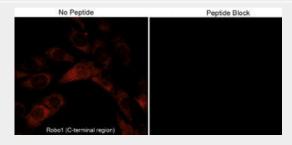
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-Robo1 (C-terminal region) Antibody - Images





Western blot analysis of HepG2 (lanes 1 & 4), C2C12 (lanes 2 & 5), and HUVEC (lanes 3 & 6). The blot was probed with anti-Robo1 (C-terminal region) in absence (lanes 1-3) or presence of Robo1 (C-terminal region) blocking peptide (RX2795; lanes 4-6).



Immunocytochemical labeling of Robo1 in mouse C2C12. The cells were labeled with rabbit polyclonal Robo1 (C-terminal region) in the absence or presence of blocking peptide (RX2795). The antibody was then detected using appropriate secondary antibodies conjugated to Cy3.

# Anti-Robo1 (C-terminal region) Antibody - 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.