



# Recombinant Protein Technical Manual

## Recombinant Mouse ROBO4 Protein (His Tag)

RPES2925

### Product Data:

**Product SKU:** RPES2925

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_083059.2

### Protein Information:

**Molecular Mass:** 49.6 kDa

**AP Molecular Mass:** 65 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 97 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** 1200012D01Rik;AI593217

## Immunogen Information:

**Sequence:** Met 1-Glu 480

## Background:

Roundabout homolog 4, also known as magic roundabout and ROBO4 is a member of the immunoglobulin superfamily and ROBO family. ROBO4 is specifically expressed in endothelial cells. It is expressed at sites of angiogenesis in different tumor types. ROBO4 contains two fibronectin type-III domains and two Ig-like C2-type (immunoglobulin-like) domains. ROBO4 is the fourth identified member of the roundabout receptor family. It is the only Robo family member expressed in primary endothelial cells and that application of Slit inhibits their migration. ROBO4 is predominantly expressed in embryonic or tumor vascular endothelium and is considered important for vascular development and as a candidate tumor endothelial marker. ROBO4 is a bona fide member of the Robo family and may provide a repulsive cue to migrating endothelial cells during vascular development. ROBO4 is a receptor for Slit proteins, at least for SLIT2, and seems to be involved in angiogenesis and vascular patterning. ROBO4 may mediate the inhibition of primary endothelial cell migration by Slit proteins. Activating ROBO4 may have broad therapeutic application in diseases characterized by excessive angiogenesis and/or vascular leak.