

Recombinant Mouse ROBO4 Protein (His Tag)

Catalog No. PKSM040371

Note: Centrifuge before opening to ensure complete recovery of vial contents.

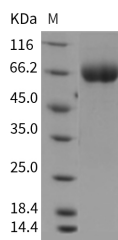
Description

Synonyms	1200012D01Rik;AI593217
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Glu 480
Accession	NP_083059.2
Calculated Molecular Weight	49.6 kDa
Observed molecular weight	65 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

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

For Research Use Only

different tumor types. ROBO4 contains twofibronectin type-III domains and twoIg-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.