Data Sheet (Cat.No.TMPY-02631)

TargetMol

ROBO4 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	AI593217;roundabout, axon guidance receptor, homolog 4 (Drosophila);Robo4; 1200012D01Rik
Protein Construction:	Leu28-Trp480
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q8C310
Molecular Weight:	50.3 kDa (Predicted); 60-70 kDa (Due to glycosylation)

QC Testing

Biological Activity:	Activity testing is not tested. It is theoretically active, but we cannot guarantee it.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Roundabout4 (Robo4) is a transmembrane receptor that belongs to the Roundabout (Robo) family of axon guidance molecules. Robo4 is an endothelial-specific receptor that participates in endothelial cell migration, proliferation, and angiogenesis and the maintenance of vasculature homeostasis. Robo4 is a promising and potentially valuable therapeutic target for treating pathological angiogenesis and developmental defects in angiogenesis.

Reference

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Park,K.W. et al., 2003,Dev Biol. 261 (1):251-67.
Yoshikawa,M. et al., 2008, Protein Expr Purif. 61 (1):78-82.
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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481