For Research Use Only

Recombinant Mouse CD320 protein (rFc Tag)

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Catalog Number: Eg6327

Basic Information

Species:
Mouse

Purity:
>90 %, SDS-PAGE

Tag:
rFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Mouse CD320 protein Ala29-Gly208 (Accession# Q9Z1P5-1) with a rabbit IgG Fc tag at the C-terminus.

GeneID:
54219

Accession:
Q9Z1P5-1

Predicted Molecular Mass:
45.1 kDa

SDS-PAGE:
58-70 kDa , reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

CD320 is a type I transmembrane glycoprotein of LDL receptor family functioning as transcobalamin-bound vitamin B12 receptor. It mediates ligand endocytosis to supply cellular cobalamin essential for DNA synthesis and B lymphocyte proliferation in germinal center. Aberrant CD320 mutation causes inherited methylmalonic aciduria, while its overexpression in liver cancer and multiple myeloma fuels malignant proliferation via enhanced B12 intake. Targeted drug conjugates coupled with cobalamin and anti-CD320 antibodies are under preclinical development for tumor-specific chemotherapy, making CD320 a promising delivery and therapeutic target.

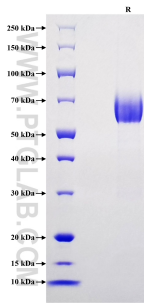
References

1. Quadros, Edward V et al. Blood vol. 113,1 (2009): 186-92.
2. Alam, Amer et al. Nature communications vol. 7 12100. 14 Jul. 2016.

Synonyms

CD320 antigen, TCblR, Transcobalamin receptor

Selected Validation Data



Purity of Recombinant Mouse CD320 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.