

Synonym

Plexin B2, PLXNB2, KIAA0315, MM1, Plexin-B2

Source

Human Plexin B2, His Tag(PL2-H52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 20 - Arg 1160 (Accession # [O15031-1](#)).

Molecular Characterization

PLXNB2(Leu 20 - Arg 1160)
O15031-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 127.0 kDa. The protein migrates as 150-180 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

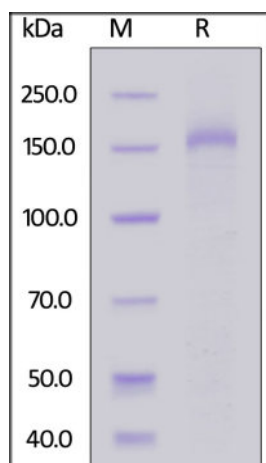
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

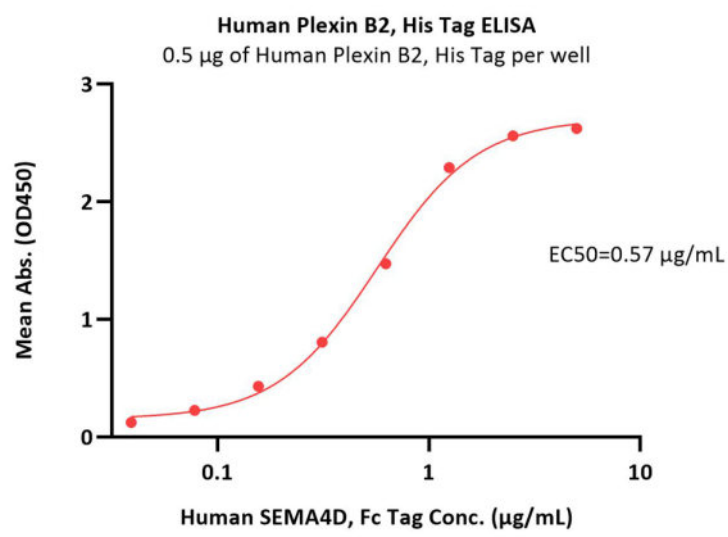
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human Plexin B2, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human Plexin B2, His Tag (Cat. No. PL2-H52H3) at 5 µg/mL (100 µL/well) can bind Human SEMA4D, Fc Tag (Cat. No. CD0-H5257) with a linear range of 0.039-1.25 µg/mL (QC tested).

Background

Plexin B2 serves as the receptor of Sema4C and Sema4G. By signaling the effect of Sema4C and Sema4G, the plexin B2 receptor plays important roles in neural tube closure and cerebellar granule cell development. Mice lacking Plexin B2 demonstrated defects in closure of the neural tube and disorganization of the embryonic brain. In developing kidney, Sema4C-Plexin B2 signaling modulates ureteric branching. Plexin B2 is expressed both in the pretubular aggregates and the ureteric epithelium in the developing kidney. Deletion of Plexin B2 results in renal hypoplasia and occasional double ureters. The Sema domain is located at the N-terminus and contains four disulfide bonds formed by eight conserved cysteine residues. It serves as a ligand-recognition and -binding module.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.