Human Neuropilin 2 / NRP2 Protein (Fc Tag)

Catalog Number: **10695-H02H**

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General Information

Gene Name Synonym:

Neuropilin-2; NP2; NPN2; PRO2714; VEGF165R2; 1110048P06Rik; Np-2; Np2; Npn-2; Npn2

Protein Construction:

A DNA sequence encoding the human NRP2 (NP_003863.2)(Met1-Tyr855) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Gln 23

Molecular Mass:

The recombinant human NRP2/Fc is a disulfide-linked homodimer. The reduced monomer comprises 1072 amino acids and has a predicted molecular mass of 120.7 kDa. The apparent molecular mass of the protein is approximately 119-129 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

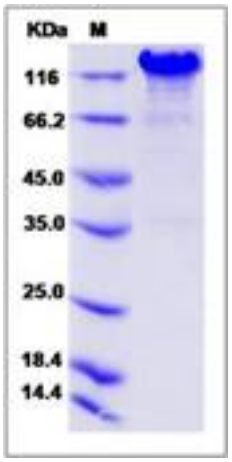
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Neuropilin-2 (NRP-2) which is related to NRP-1, is a type I? transmembrane glycoprotein and has the structure characteristic with five main extracellular domains: two complement binding (CUB) domains, two coagulation factor V/VIII homology domains, and a MAM (meprin, tyrosine phosphatase domain) region. NRP-2 is a receptor capable of binding two disparate ligands, classIII semaphorins (SEMA) and vascular endothelial growth factors (VEGF), and thus regulates two diverse systems by activating cellular signaling pathways via interacting with other cell surface receptors such as VEGF receptors and plexins. NRP-2 is well known for its role in facilitating axonal guidance during the development of the neuronal system, and additionally, it is also expressed in vascular endothelial cells and lymphatic endothelium where it affects proliferation, migration, angiogenesis, as well as formation of small lymphatic vessels and capillaries. Recent study has identified NRP-2 as a polysialylated protein expressed in human dendritic cells and modulates DC-T cell Interactions. Nearly all tumor cells express neuropilins and NRP-2 is predominantly expressed in neuronal tumors and melanomas. Furthermore, it is suggested that as the specific ligand for NRP-2, SEMA 3F inhibits tumor angiogenesis and metastasis.

References

1.Chen H. et al., 1997, Neuron. 19: 547-59.
2.Bielenberg DR. et al., 2006, Exp Cell Res. 312: 584-93.
3.Yuan L. et al., 2002, Development. 129: 4797-806.