

PRODUCT DATA SHEET

COMPLEX

Complex Biotech Co., Ltd

CD304 Recombinant Protein

Catalog: BCP3495

Host: E.coli

Tag: His-tag

His-tag

BackGround:

Class 3 secreted semaphorin (Sema3A) is a chemorepellent that acts upon a wide variety of axons. As such, it induces a dramatic redistribution and depolymerization of actin filaments that results in growth cone collapse. Plexins are single pass, transmembrane signaling proteins encompassing Plexin A1, A2, A3 and A4. Plexins form a complex with neuropilin-1 and -2 and the cell adhesion protein L1 to form a functional semaphorin receptor. The GTPase Rnd1 binds to the cytoplasmic domain of Plexin A1 to trigger cytoskeletal collapse. In contrast, the GTPase RhoD blocks Rnd1-mediated Plexin A1 activation and repulsion of sympathetic axons by Sema3A.

Neuropilin-1, a single pass transmembrane glycoprotein, was originally identified as a semaphorin receptor mediating axon growth cone collapse. In addition, neuropilin-1 is involved in axonal fasciculation, neuronal migration, dendritic guidance and repair of the adult nervous system. Neuropilin-1 is also an isoform-specific VEGF receptor on tumor and endothelial cells. Loss of neuropilin-1 function causes vascular remodeling and branching defects, which is compounded by additional loss of neuropilin-2 function.

Product:

PBS, 4M Urea, PH7.4

Molecular Weight:

~100kDa

Swiss-Prot:

O14786

Purification&Purity:

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

Restriction Sites:

NdeI-XhoI

Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Expression Vector:

pet-22b(+)

DATA:



Note:

For research use only, not for use in diagnostic procedure.