

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## CD304 Recombinant Protein

Catalog: NCP0366

Host: E.coli

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.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416, USA.

Email: [info@bioworld.com](mailto:info@bioworld.com)

Tel: 6123263284

Fax: 6122933841

### Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: [info@biogot.com](mailto:info@biogot.com)

Tel: 0086-025-68037686

Fax: 0086-025-68035151