



# Recombinant Protein Technical Manual

## Recombinant Rat Semaphorin 4D/SEMA4D/CD100 Protein (Fc Tag)

RPES4638

### Product Data:

**Product SKU:** RPES4638

**Size:** 50µg

**Species:** Rat

**Expression host:** HEK293 Cells

**Uniprot:** NP\_001164034.1

### Protein Information:

**Molecular Mass:** 103.4 kDa

**AP Molecular Mass:** 118 kDa

**Tag:** C-Fc

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

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

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** SEMA4D

## Immunogen Information:

**Sequence:** Met1-Met712

## Background:

Semaphorin-4D is also known as A8, BB18, GR3, CD100. Semaphorin-4D belongs to the semaphorin family containing 1 Ig-like C2-type domain, 1 PSI domain and 1 Sema domain. It is the cell surface receptor for PLXN1B and PLXNB2 that plays an important role in cell-cell signaling. It promotes the migration of cerebellar granule cells and of endothelial cells, regulates dendrite and axon branching and morphogenesis. Semaphorin-4D Plays a role in the immune system; Promotes signaling via SRC and PTK2B/PYK2, which then mediates activation of phosphatidylinositol 3-kinase and of the AKT1 signaling cascade.