



# Recombinant Protein Technical Manual

**Recombinant Human Semaphorin 4D/SEMA4D  
Protein (His Tag)**  
RPES4305

## Product Data:

**Product SKU:** RPES4305

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q92854

## Protein Information:

**Molecular Mass:** 80.2 kDa

**AP Molecular Mass:** 112 kDa

**Tag:** C-6His

**Bio-activity:**

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

**Endotoxin:** < 1.0 EU per µg 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 a 0.2 µm filtered solution of 20mM PB,150mM NaCl, pH 7.4.

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

**Application:**

**Synonyms:** Semaphorin-4D; A8;BB18; GR3; CD100;C9orf164;CD100;coll-4;M-sema-G;SEMAJ

## Immunogen Information:

**Sequence:** Met22-Arg734

## 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.