



Recombinant Protein Technical Manual

**Recombinant Mouse Semaphorin-4D/SEMA4D
Protein (His Tag)(Active)**
RPES0544

Product Data:

Product SKU: RPES0544

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_038688.2

Protein Information:

Molecular Mass: 80.2 kDa

AP Molecular Mass: 10010 kDa

Tag: C-His

Bio-activity: Measured by its ability to bind human SEMA4A in a functional ELISA.

Purity: > 96 % 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: Functional ELISA

Synonyms: SEMA4D;Semaphorin-4D;M-Sema G;Semaphorin-C-like 2;Semaphorin-J;Sema J;CD100;Semacl2;Semaj;coll-4;Semacl2;Semaj

Immunogen Information:

Sequence: Met 1-Arg 733

Background:

Semaphorin 4D (SEMA4D or CD1) is a member of the semaphorin family of proteins and an important mediator of the movement and differentiation of multiple cell types, including those of the immune, vascular, and nervous systems. VEGF and SEMA4D had a positive correlation with the malignant degree of ovarian cancer, and SEMA4D can serve as an independent prognostic factor. SEMA4D was the first semaphorin described to have immune functions and serves important roles in T cell priming, antibody production, and cell-to-cell adhesion. Proteolytic cleavage of SEMA4D from the cell surface gives rise to a soluble fragment of SEMA4D (sSEMA4D). Similar to the transmembranal form, sSEMA4D is thought to have immunoregulatory properties.