



# Recombinant Protein Technical Manual

**Recombinant Human Semaphorin 4G/SEMA4G  
Protein (His Tag)**  
RPES4208

## Product Data:

**Product SKU:** RPES4208

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q9NTN9-2

## Protein Information:

**Molecular Mass:** 74.0 kDa

**AP Molecular Mass:** 90-95 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 PBS, pH7.4.

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

**Application:**

**Synonyms:** Semaphorin-4G; KIAA1619; SEMA4G

## Immunogen Information:

**Sequence:** Val18-Leu680

## Background:

Semaphorin-4G is belongs to the semaphorin family, contains 1 Ig-like C2-type domain, 1 PSI domain, 1 Sema domain. Semaphorins are a large family of conserved secreted and membrane associated proteins which possess a semaphorin (Sema) domain and a PSI domain (found in plexins, semaphorins and integrins) in the N-terminal extracellular portion. Based on sequence and structural similarities, semaphorins are put into eight classes: invertebrates contain classes 1 and 2, viruses have class V, and vertebrates contain classes 3-7. Semaphorins serve as axon guidance ligands via multimeric receptor complexes, some (if not all) containing plexin proteins. This gene encodes a class 4 semaphorin.