# Product Name: Recombinant Human SEMA5A (C-6His) Catalog #: PHH1488



## **Summary**

Name Semaphorin 5A/SEMA5A

**Purity** Greater than 95% as determined by reducing SDS-PAGE

**Endotoxin level** <1 EU/μg as determined by LAL test.

Construction Recombinant Human Semaphorin 5A is produced by our Mammalian

expression system and the target gene encoding Glu23-Thr765 is expressed

with a 6His tag at the C-terminus.

Accession # Q13591

**Host** Human Cells

**Species** Human

Predicted Molecular Mass 84.71 KDa

Formulation Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

Shipping The product is shipped at ambient temperature. Upon receipt, store it

immediately at the temperature listed below.

**Stability&Storage** Store at  $\leq$ -70°C, stable for 6 months after receipt. Store at  $\leq$ -70°C, stable for 3

months under sterile conditions after opening. Please minimize freeze-thaw

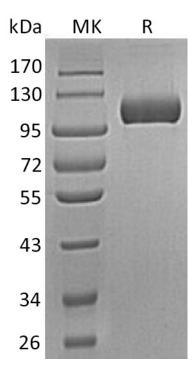
cycles.

**Reconstitution** Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is

not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles. Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100µg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## SDS-PAGE image





### **Alternative Names**

Semaphorin-5A; Semaphorin-F; Sema F; SEMA5A; SEMAF

## **Background**

Semaphorin-5A (SEMA5A) is a member of the Semaphorin family of axon guidance molecules. SEMA5A is a 140 kDa protein. Class 5 Semaphorins are type I transmembrane glycoproteins with an N- terminal Sema domain and multiple juxtamembrane type 1 Thrombospondin (TSP) repeats within their extracellular domains. SEMA5A is expressed in neuroepithelial cells surrounding retinal axons, oligodendrocytes, the base of limb buds, the mesoderm surrounding cranial vessels, and the cardiac atrial septum and endocardial cushions, Human SEMA5A cDNA encodes a signal sequence, a extracellular domain (ECD), a transmembrane sequence and an cytoplasmic portion. SEMA5A mutations have been implicated in the genetic syndrome, cri-du-chat, while some polymorphisms may increase risk for neurodegenerative diseases such as Parkinson. The expression of SEMA5A may be upregulated in metastatic cancer cells and downregulated in autism.

#### Note

For Research Use Only, Not for Diagnostic Use.