Recombinant Human SEMA5A (C-6His)

Catalog No: C499

Description	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.
Source	Human Cells
Alternative name	Semaphorin-5A; Semaphorin-F; Sema F; SEMA5A; SEMAF
Predicted Molecular Weight	84.71kDa
AP Molecular Weight	100kDa, reducing conditions.
Accession No.	Q13591
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.
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.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
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.

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