

## 32-7452: Recombinant Human Semaphorin-5A/SEMA5A (C-6His)

**Gene :** SEMA5A

**Gene ID :** 9037

**Uniprot ID :** Q13591

### Description

Source: Human Cells.

MW :84.71kD.

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. 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.

### Product Info

**Amount :** 10 µg / 50 µg

**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 0.1mM EDTA, 0.05% Tween 20, pH 7.2.

**Storage condition :** 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.

**Amino Acid :** EAQGTTCQQRTEHPVISYKEIGPWLREFRAKNAVDFSQLTDFDPGQKELVVGARNYLFRLQLEDLSLIQAVEWEC  
DEATKKACYSKGSKEECQNYIRVLLVGGDRLFTCGTNAFTPVCTNRSLSNLIEHDQISGMARCPYSPQHNST  
ALLTAGGELYAATAMDFPGRDPAIYRSLGILPPLRTAQYNSKWLNPNFVSSYDIGNFTYFFFRENAVEHDCGKT  
VFSRAARVCKNDIGGRFLEDTWTTFMKARLNCSRPGVPPFYNELQSTFFLPELDLIYGIFTTNVNSIAASAVCV  
FNLSAIAQAFSGPFKYQENSRSAWLPYPNPNPHFQCGTVDQGLYVNLTERNLQDAQKFLMHEVVQPVTTPVPSF  
MEDNSRFSHVAVDVVQGREALVHIYLATDYGTIKKVRVPLNQTSSSCLLEEIEFPERRRPIRSLQILHSQSVLF  
VGLREHVVKIPLKRCQFYRTRSTCIGAQDPYCGWDVVMKKCTSLEESLSMTQWEQSIACPTRNLTVDGHFV  
WSPWTPCTHTDGSVAVGSCLCRTRSCDSPAPQCGGWQCEGPGMEIANCSRNGGWTPWTSWSPCSTTCGIGF  
QVRQRSCSNPTPRHGGRVCGQNRREERYCNEHLLCPPHMFWTGWGPWERCTAQCGGGIARRRICENGPD  
CAGCNVEYQSCNTNPCPELKKTPWTPWTPVNIISDNGGHYEQRFRTYCKARLADPNLLEVGRQRIEMRYCSSD  
GTSGCSTLDHHHHHH

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.