

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. Q13591	
Accession #		
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

kDa	MK	R
170 130		
95	_	
72	-	
55	-	
43	-	
34	-	
26	-	



Background

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.