

Mouse SEMA7A Protein, Ultra Low Endotoxin



Cat. No. SEM-MM17A-UL

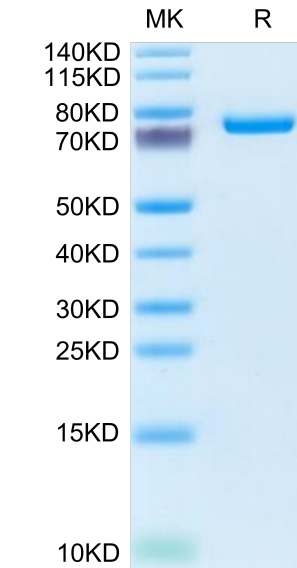
Description	
Source	Recombinant Mouse SEMA7A Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln45-Ala646.
Accession	Q9QUR8
Molecular Weight	The protein has a predicted MW of 69.5 kDa. Due to glycosylation, the protein migrates to 70-80 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

Formulation and Storage	
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background	
Semaphorin7A (Sema7A) plays an important role in the immunoregulation of the brain. Sema7A is upregulated in the epileptic brain and plays a potential role in the regulation of seizure activity in PTZ-kindled epileptic rats, which may be related to neuroinflammation. Sema7A promotes the inflammatory cytokines TNF-α and IL-6 as well as the growth of mossy fibers through the ERK pathway, suggesting that Sema7A may promote seizures by increasing neuroinflammation and activating pathological neural circuits. Sema7A plays a critical role in epilepsy and could be a potential therapeutic target for this neurological disorder.	

Assay Data

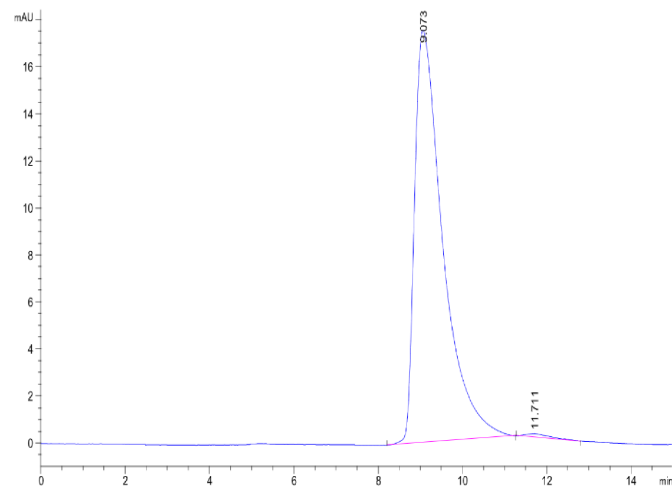
Bis-Tris PAGE



Mouse SEMA7A on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



The purity of Mouse SEMA7A is greater than 90% as determined by SEC-HPLC.