

Mouse SEMA7A Protein

Cat. No. SEM-MM17A

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 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

Formulation and Storage

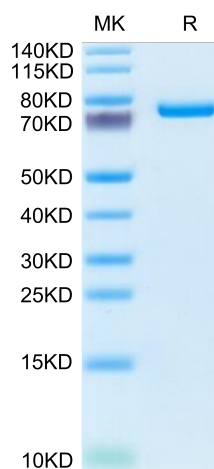
Formulation	Supplied as 0.22 μm filtered solution in PBS (pH 7.4).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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.

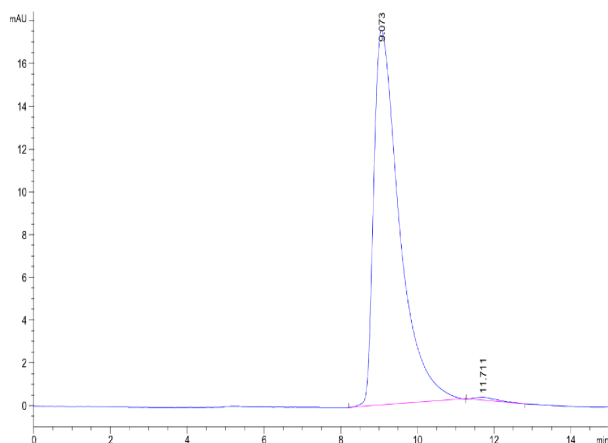
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



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