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Datasheet for ABIN7275564

SEMA7A Protein (AA 45-648) (His tag)

2 Images

Overview

Quantity:	100 µg
Target:	SEMA7A
Protein Characteristics:	AA 45-648
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SEMA7A protein is labelled with His tag.

Product Details

Purpose:	Human SEMA7A Protein
Sequence:	Gln45-Ala648
Characteristics:	Recombinant Human SEMA7A Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln45-Ala648.
Purity:	> 95 % as determined by Tris-Bis PAGE, > 95 % as determined by HPLC
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1EU per µg by the LAL method.

Target Details

Target:	SEMA7A
Alternative Name:	SEMA7A (SEMA7A Products)

Target Details

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.

Molecular Weight: 69.5 kDa. Due to glycosylation, the protein migrates to 70-75 kDa based on Tris-Bis PAGE result.

Pathways: [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Regulation of Cell Size](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Centrifuge the tube before opening. Reconstituting to a concentration more than 100 μ g/mL is recommended. Dissolve the lyophilized protein in distilled water.

Buffer: Lyophilized from 0.22 μ m filtered solution in PBS (pH 7.4). Normally 8 % trehalose is added as protectant before lyophilization.

Storage: -20 °C, -80 °C

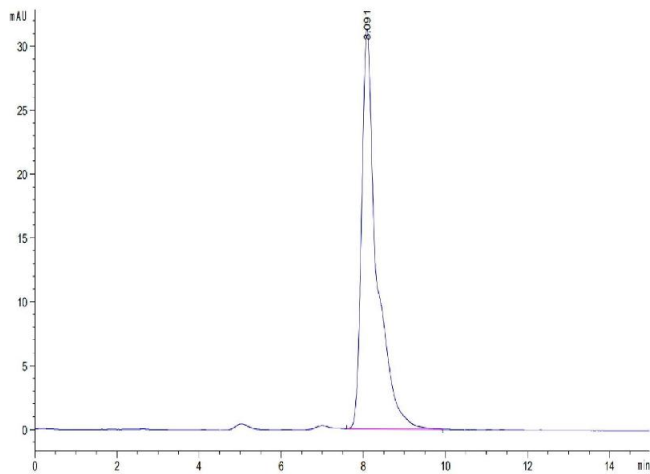
Storage Comment: -20 to -80°C for 12 months as supplied from date of receipt., -80°C for 3-6 months after reconstitution., 2-8°C for 2-7 days after reconstitution., Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Expiry Date: 12 months



SDS-PAGE

Image 1. Human SEMA7A on Tris-Bis PAGE under reduced condition. The purity is greater than 95 % .



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 2. The purity of Human SEMA7A is greater than 95 % as determined by SEC-HPLC.