

Human HAI-1 Protein

Cat. No. HAI-HM11A

Description

Source	Recombinant Human HAI-1 Protein is expressed from HEK293 with His tag at the C-terminus. It contains Gly36-Val433.
Accession	O43278-2
Molecular Weight	The protein has a predicted MW of 45.50 kDa. Due to glycosylation, the protein migrates to 50-70 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 > 95% as determined by HPLC

Formulation and Storage

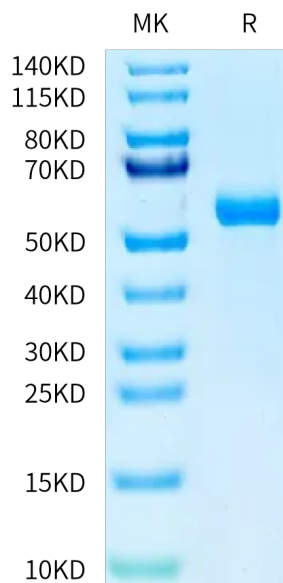
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
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

SPINT1, also known as HAI-1, is a Kunitz-type serine protease inhibitor that inhibits multiple proteases including hepatocyte growth factor (HGF) activator and matriptase. SPINT1 has been shown to modulate HGF/MET activation in certain cancer types.

Assay Data

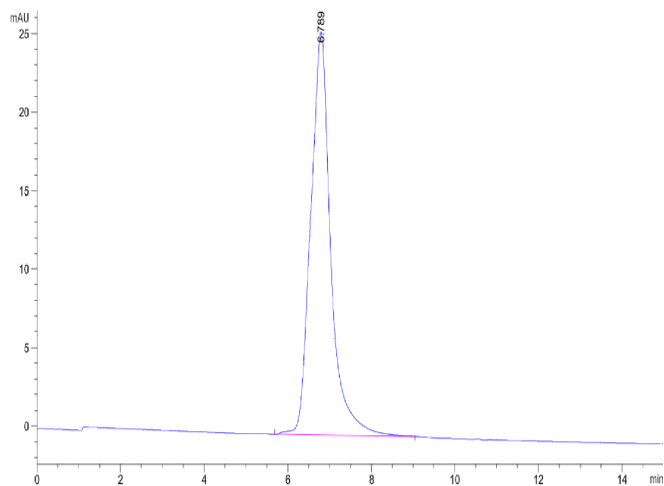
Bis-Tris PAGE



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

SEC-HPLC

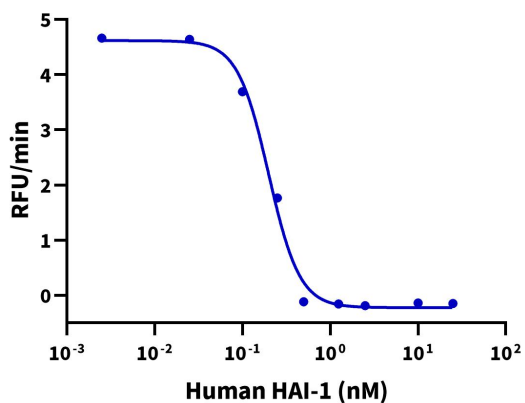
Assay Data



The purity of Human HAI-1 is greater than 95% as determined by SEC-HPLC.

Bioactivity Data

Recombinant Human HAI-1 Bioactivity



Measured by its ability to inhibit trypsin cleavage of a fluorogenic peptide substrate, Mca-Arg-Pro-Lys-Pro-Val-Glu-NVAL-Trp-Arg-Lys(DNP)-NH₂. The IC₅₀ is < 1 nM.