Human Serpin G1 / C1 inhibitor Protein, His Tag (active enzyme, MALS verified)

Catalog # SER-H52H5

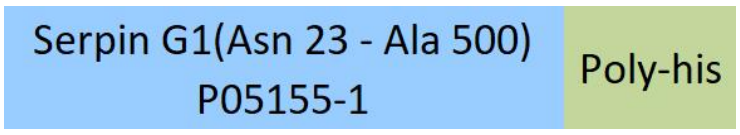
Synonym

SERPING1,C1IN,C1-INH,C1IN,HAE1,HAE2

Source

Human Serpin G1 Protein, His Tag(SER-H52H5) is expressed from human 293 cells (HEK293). It contains AA Asn 23 - Ala 500 (Accession # P05155-1). Predicted N-terminus: Asn 23

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 54.7 kDa. The protein migrates as 75-105 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.1 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

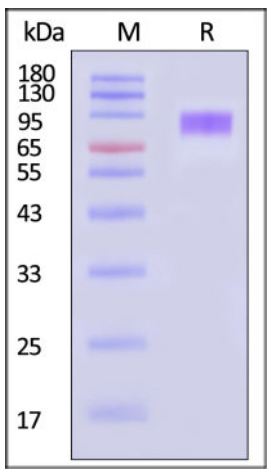
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

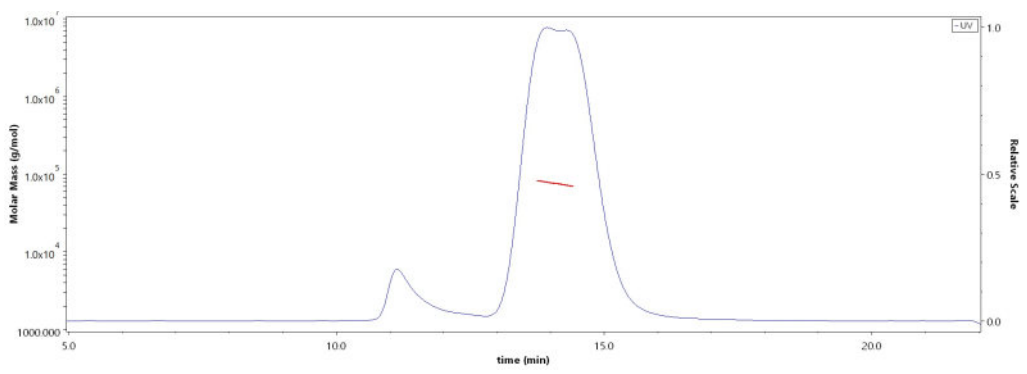
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



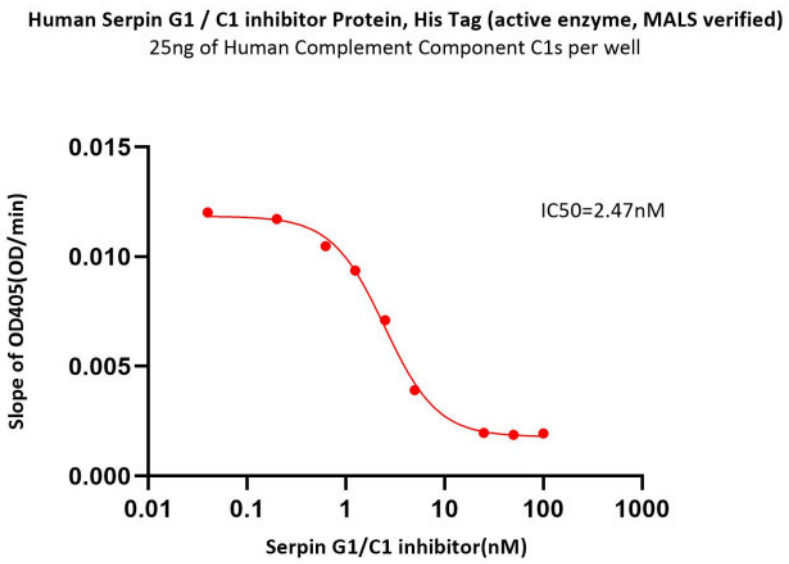
Human Serpin G1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Human Serpin G1 Protein, His Tag (Cat. No. SER-H52H5) is more than 85% and the molecular weight of this protein is around 65-85 kDa verified by SEC-MALS.
Report

Bioactivity



.Measured by its ability to inhibit Recombinant Human Complement Component C1s cleavage of a colorimetric peptide substrate, N-carbobenzyloxy-Lys-ThioBenzyl ester (Z-K-SBzl). The IC50 is <4 nM (QC tested).

Background

Serpin G1/C1-inhibitor (C1-INH) is an important regulator of the complement, coagulation, fibrinolytic and contact systems. The quantity of protease/C1-INH complexes in the blood is proportional to the level of the in vivo activation of these four cascade-like plasma enzyme systems. It inhibits activated C1r and C1s of the first complement component and thus regulates complement activation. It is synthesized in the liver, and its deficiency is associated with hereditary angioneurotic oedema (HANE).

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.