

**Synonym**

SerpD1,HCF2,HLS2,HC-II

**Source**

Human Serpin D1, His Tag (HC2-H5224) is expressed from human 293 cells (HEK293). It contains AA Gly 20 - Ser 499 (Accession # [AAH35028](#)).

Predicted N-terminus: Gly 20

**Molecular Characterization**

SerpD1(Gly 20 - Ser 499) AAH35028	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 55.7 kDa. The protein migrates as 66-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl, pH 7.5. Normally trehalose is added as protectant before lyophilization.

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.*

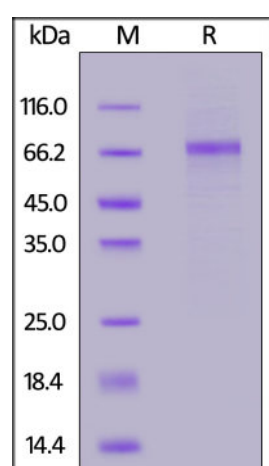
**Storage**

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 D1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**Background**

Serpin D1 is also known as Heparin cofactor 2 (HCF2), Protease inhibitor leuserpin-2 (HLS2), Heparin cofactor II (HC-II), which belongs to the serpin family. HCF2 is expressed predominantly in liver. Thrombin inhibitor activated by the glycosaminoglycans, heparin or dermatan sulfate. In the presence of the latter, SerpinD1 / HC-II becomes the predominant thrombin inhibitor in place of antithrombin III (AT-III). In a glycosaminoglycan-independent manner, serpinD1 / HC-II also inhibits chymotrypsin. Peptides at the N-terminal of HC-II have chemotactic activity for both monocytes and neutrophils.

**Clinical and Translational Updates**

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.