Human B7-H5 / Gi24 / VISTA Protein, His Tag (MALS verified)

Catalog # B75-H52H0

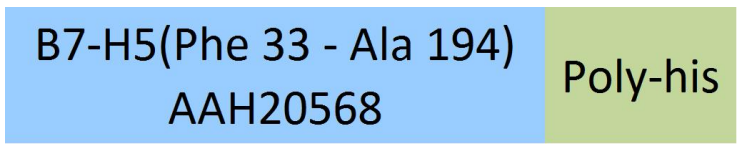
Synonym

B7-H5,SISP1,Gi24,VISTA

Source

Human B7-H5, His Tag(B75-H52H0) is expressed from human 293 cells (HEK293). It contains AA Phe 33 - Ala 194 (Accession # AAH20568).
Predicted N-terminus: Phe 33

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 20.0 kDa. The protein migrates as 33-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

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

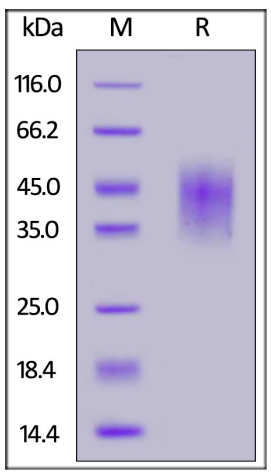
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

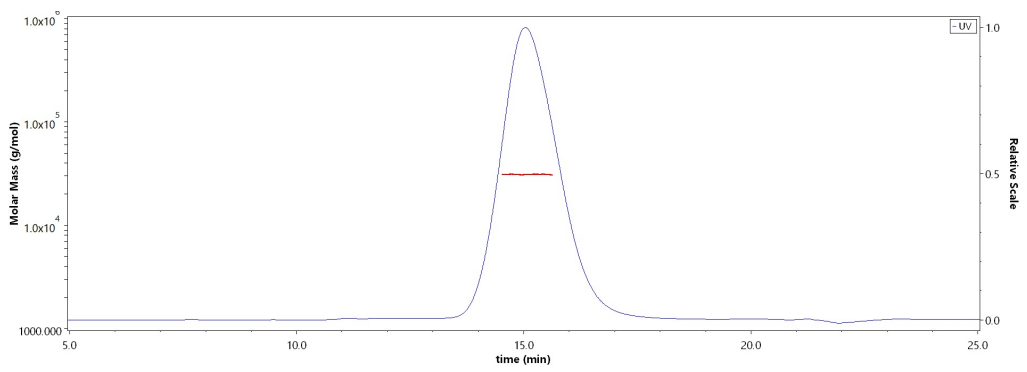
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



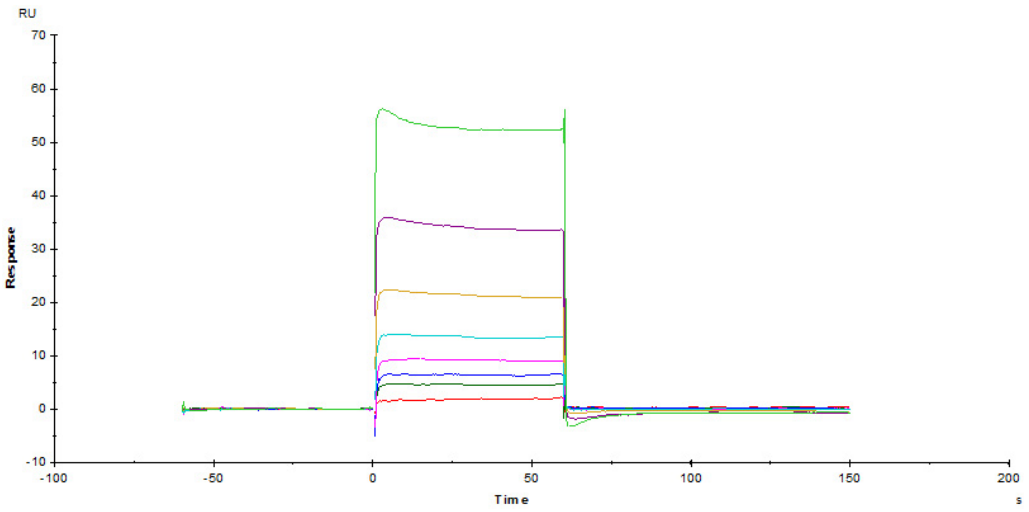
Human B7-H5, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-MALS



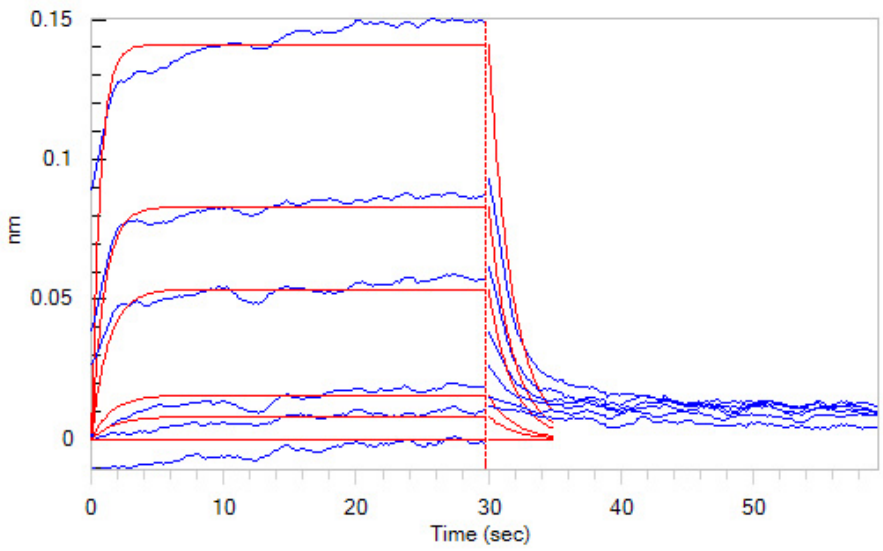
The purity of Human B7-H5, His Tag (Cat. No. B75-H52H0) is more than 95% and the molecular weight of this protein is around 25-40 kDa verified by SEC-MALS.
Report

Bioactivity-SPR

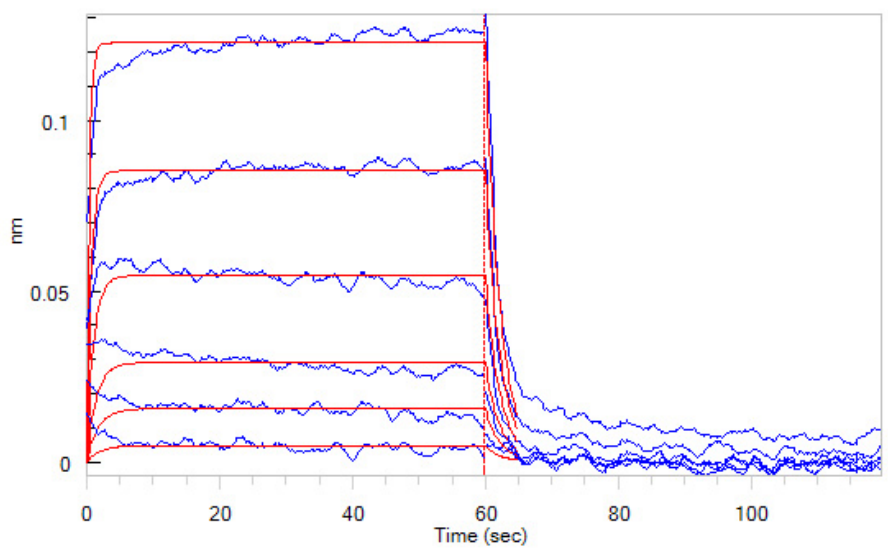


Human VSIG3, Fc Tag (Cat. No. VS3-H5258) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Human B7-H5, His Tag (Cat. No. B75-H52H0) with an affinity constant of 53.4 μM as determined in a SPR assay (Biacore T200) (Routinely tested).

Bioactivity-BLI



Loaded Human B7-H5, His Tag (Cat. No. B75-H52H0) on HIS1K Biosensor, can bind Human VSIG3, Fc Tag (Cat. No. VS3-H5258) with an affinity constant of 23 μM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Human VSIG3, Fc Tag (Cat. No. VS3-H5258) on AHC Biosensor, can bind Human B7-H5, His Tag (Cat. No. B75-H52H0) with an affinity constant of 16 μM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Platelet receptor Gi24, also known as B7-H5 and stress-induced secreted protein-1 (Sisp-1), is a protein that in humans is encoded by the C10orf54 gene, which contains 1 Ig-like (immunoglobulin-like) domain. As for C10orf54 gene, C10orf54 appears to positively interact with BMP-4, potentiating BMP signaling and the transition from an undifferentiated to a differentiated state on ESCs. Human C10orf54 undergoes proteolytic cleavage by MT1-MMP, generating a soluble 30 kDa extracellular fragment plus a 25-30 kDa membrane-bound fragment.