

#### 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 # <u>AAH20568</u>). Predicted N-terminus: Phe 33

#### **Molecular Characterization**

# B7-H5(Phe 33 - Ala 194) AAH20568

Poly-his

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.

## **Purity**

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

## **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.4. 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

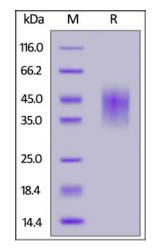
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

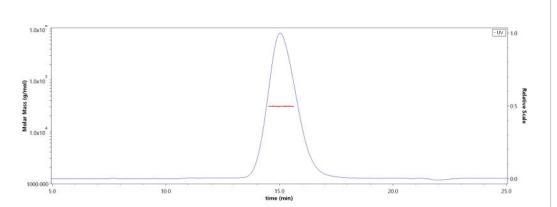
## **SDS-PAGE**



Human B7-H5, 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 90%.

# **Bioactivity-SPR**

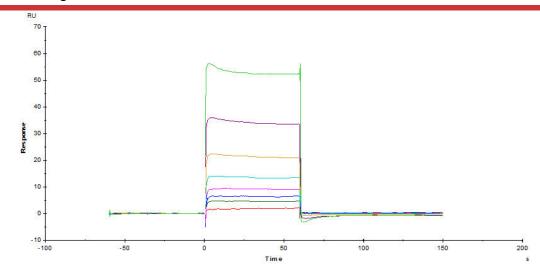
# **SEC-MALS**



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

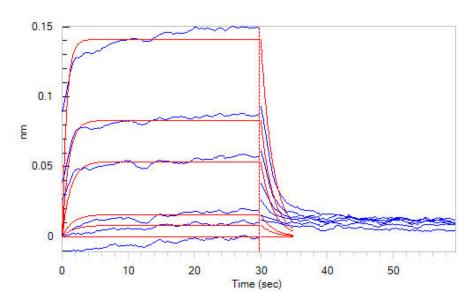
<u>Report</u>



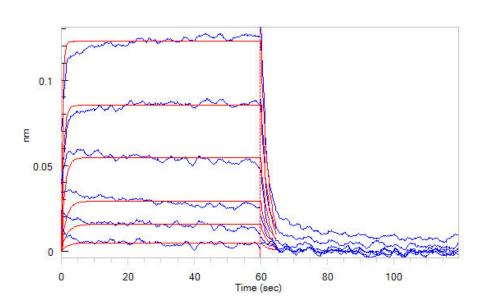


Human VSIG3, Fc Tag (Cat. No. VS3-H5258) captured on CM5 chip via Antihuman IgG Fc antibodies surface can bind Human B7-H5, His Tag (Cat. No. B75-H52H0) with an affinity constant of 53.4  $\mu$ M as determined in a SPR assay (Biacore T200) (Routinely tested).

## **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  $\mu$ M 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  $16~\mu M$  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.

# References

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