

Synonym

B7-H5,SISP1,Gi24,VISTA

Source

Biotinylated Human B7-H5, Avitag,His Tag (B75-H82E1) is expressed from human 293 cells (HEK293). It contains AA Phe 33 - Ala 194 (Accession # AAH20568.1).

Predicted N-terminus: Phe 33

Molecular Characterization

B7-H5(Phe 33 - Ala 194)
AAH20568.1 **Avi** Poly-his

This protein carries an Avi tag (Avitag™) at the C-terminus, followed by a polyhistidine tag.

The protein has a calculated MW of 20.8 kDa. The protein migrates as 36-47 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Biotin:Protein Ratio

The biotin to protein ratio is *0.5-1* as determined by the HABA assay.

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 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

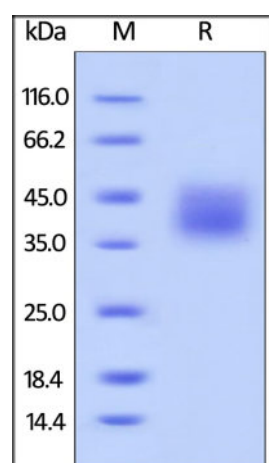
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

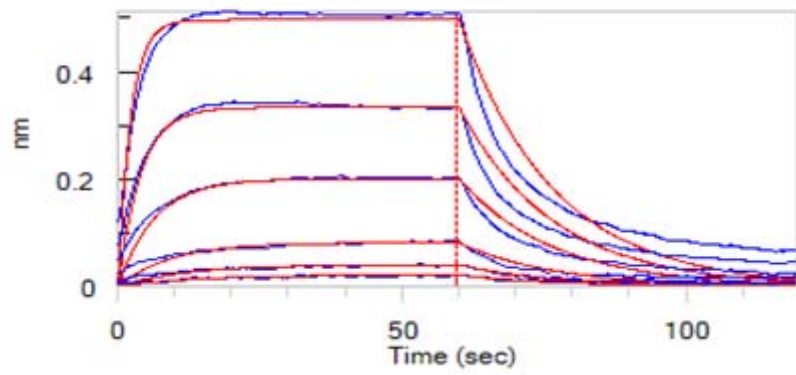
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human B7-H5, Avitag,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%.

Bioactivity-BLI



Loaded Biotinylated Human B7-H5, Avitag,His Tag (Cat. No. B75-H82E1) on SA Biosensor, can bind Human VSIG3, Fc Tag (Cat. No. VS3-H5258) with an affinity constant of 0.312 μ M as determined in BLI assay (ForteBio Octet Red96e) (QC 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

- (1) [Sakr M.A., et al., 2010, Cancer Sci. 101:2368-2374.](#)
- (2) [Mayya V., et al., 2009, Sci. Signal. 2:RA46-RA46.](#)

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