

Synonym

VSIG3,IgSF11,CXADRL1,Bt-IgSF,CT119

Source

Biotinylated Human VSIG3, Fc, Avitag(VS3-H82F9) is expressed from human 293 cells (HEK293). It contains AA Leu 23 - Gly 241 (Accession # Q5DX21-1). Predicted N-terminus: Leu 23

Molecular Characterization



This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (AvitagTM).

The protein has a calculated MW of 51.5 kDa. The protein migrates as 60 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

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

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

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

Tris with Glycine, Arginine and NaCl, pH7.5 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

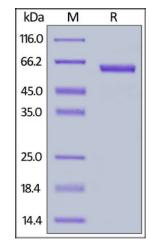
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

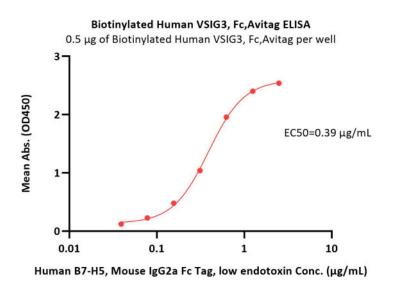


Biotinylated Human VSIG3, Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

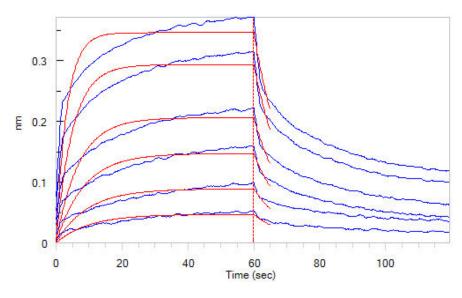






Immobilized Biotinylated Human VSIG3, Fc,Avitag (Cat. No. VS3-H82F9) at 5 μ g/mL (100 μ L/well) on Streptavidin (Cat. No. STN-N5116) precoated (0.5 μ g/well) plate, can bind Human B7-H5, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. B75-H5258) with a linear range of 0.039-0.625 μ g/mL (QC tested).

Bioactivity-BLI



Loaded Biotinylated Human VSIG3, Fc,Avitag (Cat. No. VS3-H82F9) on SA Biosensor, can bind Human B7-H5, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. B75-H5258) with an affinity constant of 2.6 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

VSIG3, also known as IGSF11, BT-IgSF, and CLMP, is a homophilic adhesion molecule that preferentially expressed in the brain. The function of VSIG3 is to stimulate cell growth through homophilic interactions. In clinical, the VSIG3 has been reported to as a novel target for cancer immunotherapy of gastrointestinal and hepatocellular carcinomas. In addition, VSIG-3 is also a ligand of B7 family member VISTA/PD-1H and inhibits human T-cell functions through a novel VSIG-3/VISTA pathway. VSIG-3/VISTA co-inhibitory pathway may provide new strategies for the treatment of human cancers and autoimmune disorders.

Clinical and Translational Updates

