

Synonym

VSIG3,IgSF11,CXADRL1,Bt-IgSF,CT119

Source

Human VSIG3, Fc Tag(VS3-H5258) is expressed from human 293 cells (HEK293). It contains AA Leu 23 - Gly 241 (Accession # Q5DX21-1). Predicted N-terminus: Leu 23

Molecular Characterization

VSIG3(Leu 23 - Gly 241) Fc(Pro 100 - Lys 330)
Q5DX21-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 49.7 kDa. The protein migrates as 60-65 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

>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

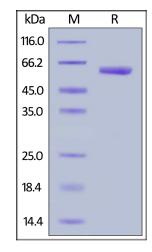
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

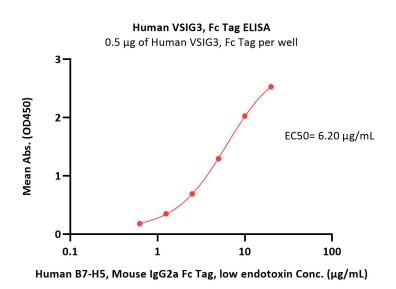


Human VSIG3, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

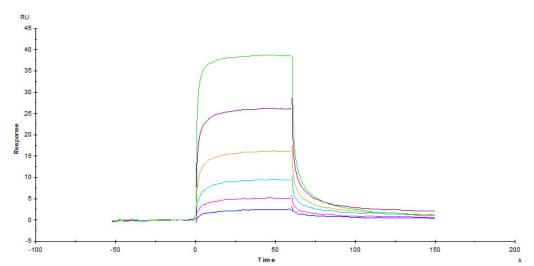






Immobilized Human VSIG3, Fc Tag (Cat. No. VS3-H5258) at 5 μ g/mL (100 μ L/well) can bind Human B7-H5, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. B75-H5258) with a linear range of 0.313-10 μ g/mL (Routinely tested).

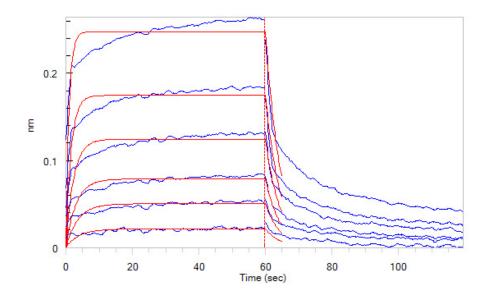
Bioactivity-SPR



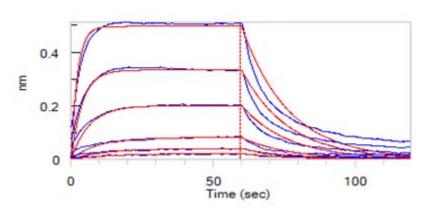
Human B7-H5, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. B75-H5258) Captured on CM5 chip via anti-mouse antibodies surface can bind Human VSIG3, Fc Tag (Cat. No. VS3-H5258) with an affinity constant of $8.87~\mu M$ as determined in a SPR assay (Biacore T200) (Routinely tested).

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 μM as determined in a SPR assay (Biacore T200) (Routinely tested).

Bioactivity-BLI



Loaded Human VSIG3, Fc Tag (Cat. No. VS3-H5258) on AHC Biosensor, can bind Human B7-H5, Mouse IgG2a Fc Tag, low endotoxin (Cat. No. B75-



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 $0.312~\mu M$ as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

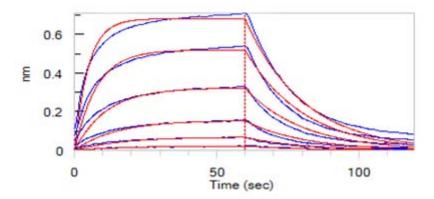


Human VSIG3 Protein, Fc Tag

Catalog # VS3-H5258



H5258) with an affinity constant of 3.7 μM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).



Loaded Biotinylated Human B7-H5, Fc,Avitag (Cat. No. B75-H82F3) on SA Biosensor, can bind Human VSIG3, Fc Tag (Cat. No. VS3-H5258) with an affinity constant of 0.617 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.

