# Human SIRP alphaV2 / CD172a Protein, Llama IgG2b Fc Tag, low endotoxin (MALS verified)

Catalog # SI2-H5255

## Synonym

SHPS1,SIRPA,CD172A,BIT,MFR,MYD1,P84,PTPNS1

## Source

Human SIRP alphaV2, Llama IgG2b Fc Tag(SI2-H5255) is expressed from human 293 cells (HEK293). It contains AA Glu 31- Arg 369 (Accession # ATD50864.1).
Predicted N-terminus: Glu 31

## Molecular Characterization

| SIRP alpha(Glu 31- Arg 369) ATD50864.1 | LlamaFc(Glu1 - Ser243) AAX73259.1 |
|---|---|

This protein carries a llama IgG2b Fc tag at the C-terminus.

The protein has a calculated MW of 65.0 kDa. The protein migrates as 70-80 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 0.01 EU per μg by the LAL method / rFC method.

## Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

## Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM 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

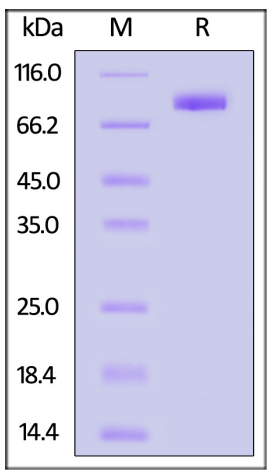
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

***Please avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

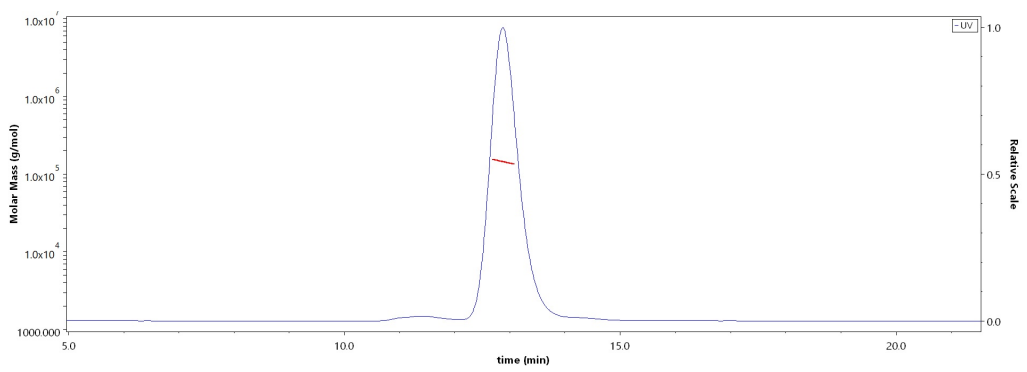
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE




Human SIRP alphaV2, Llama IgG2b 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%.

## SEC-MALS




The purity of Human SIRP alphaV2, Llama IgG2b Fc Tag (Cat. No. SI2-H5255) is more than 90% and the molecular weight of this protein is around 130-160 kDa verified by SEC-MALS.
Report

## Bioactivity-ELISA

# Human SIRP alphaV2 / CD172a Protein, Llama IgG2b Fc Tag, low endotoxin (MALS verified)

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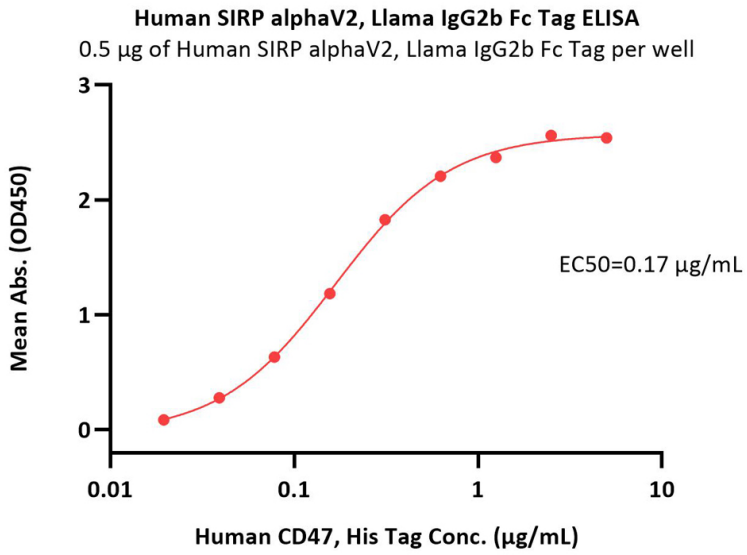
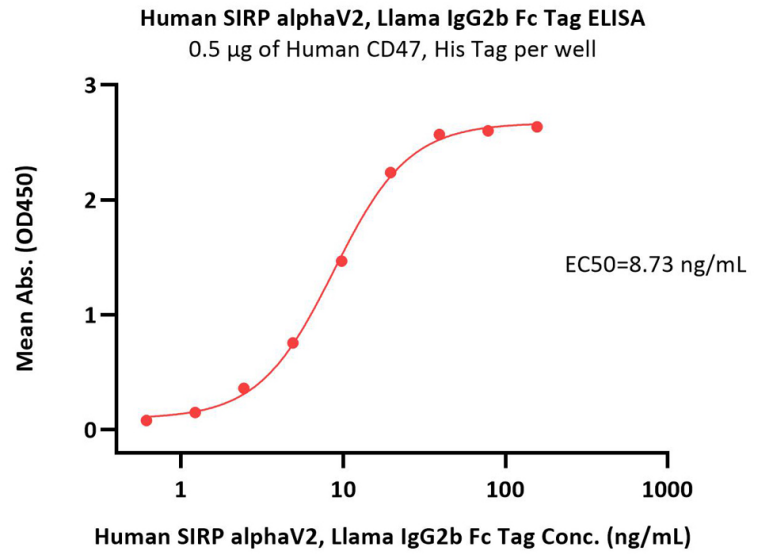



Immobilized Human SIRP alphaV2, Llama IgG2b Fc Tag (Cat. No. SI2-H5255) at 5 μg/mL (100 μL/well) can bind Human CD47, His Tag (Cat. No. CD7-H5227) with a linear range of 0.02-0.625 μg/mL (QC tested).




Immobilized Human CD47, His Tag (Cat. No. CD7-H5227) at 5 μg/mL (100 μL/well) can bind Human SIRP alphaV2, Llama IgG2b Fc Tag (Cat. No. SI2-H5255) with a linear range of 0.6-20 ng/mL (Routinely tested).

## Background

Tyrosine-protein phosphatase non-receptor type substrate 1 (SHPS1) is also known as CD172 antigen-like family member A (CD172a), Macrophage fusion receptor, MyD-1 antigen, Signal-regulatory protein alpha (SIRPA or SIRP alpha) or p84, is a member of the SIRP family, and also belongs to the immunoglobulin superfamily. SIRP alpha is Ubiquitous and highly expressed in brain. SIRPA / CD172a is immunoglobulin-like cell surface receptor for CD47 and acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. SIRPA / SHPS-1 supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment and may play a key role in intracellular signaling during synaptogenesis and in synaptic function By similarity. SIRPA / MyD1 involved in the negative regulation of receptor tyrosine kinase-coupled cellular responses induced by cell adhesion, growth factors or insulin and mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation. CD47 binding prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells.