

Synonym

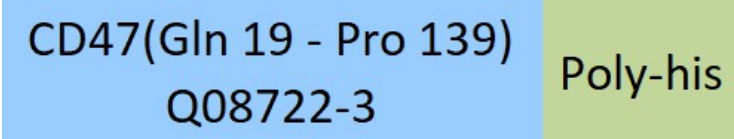
CD47,MER6,IAP,OA3

Source

Human CD47, His Tag(CD7-H5227) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Pro 139 (Accession # [Q08722-3](#)).

Predicted N-terminus: Gln 19

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 15.6 kDa. The protein migrates as 33-42 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.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 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

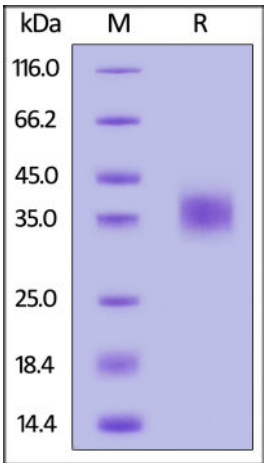
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

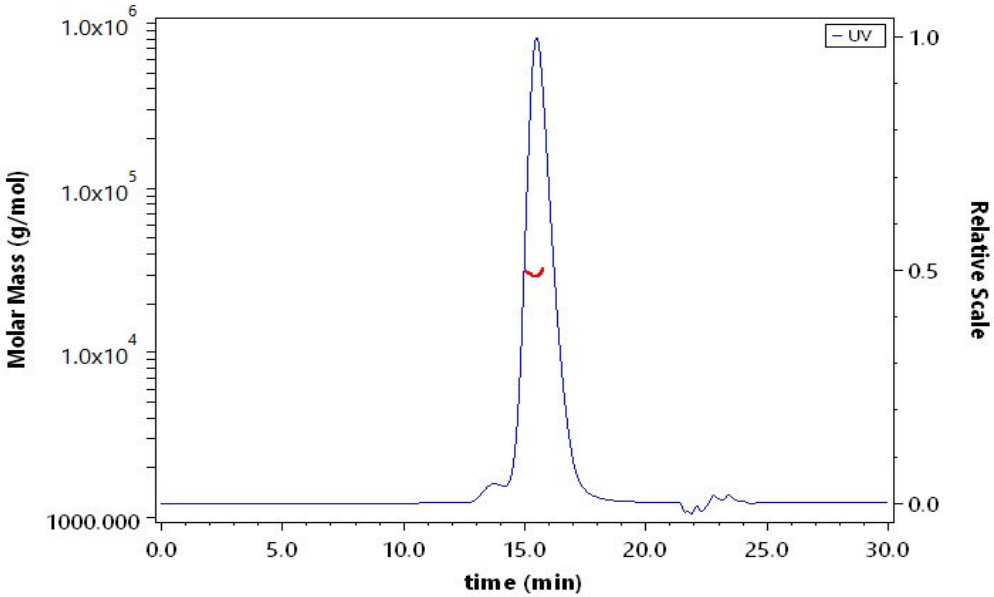
- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

SDS-PAGE



Human CD47, His 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 CD47, His Tag (Cat. No. CD7-H5227) is more than 95% and the molecular weight of this protein is around 24-36 kDa verified by SEC-MALS.

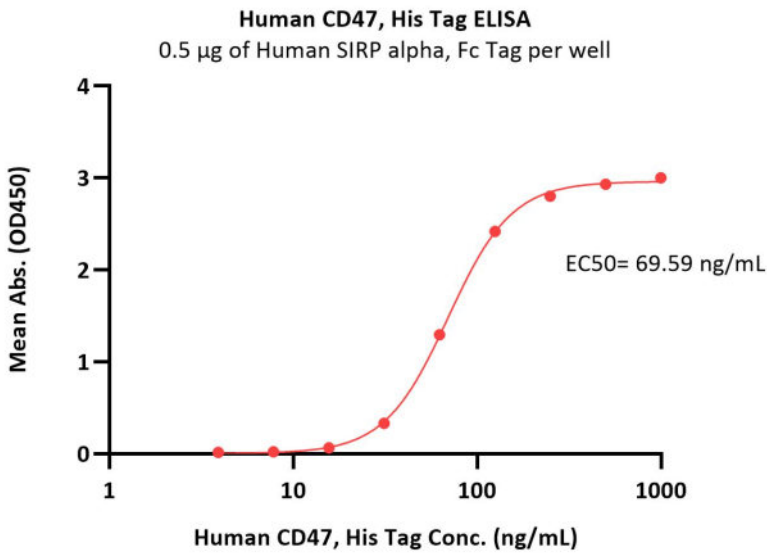
[Report](#)

Bioactivity-ELISA

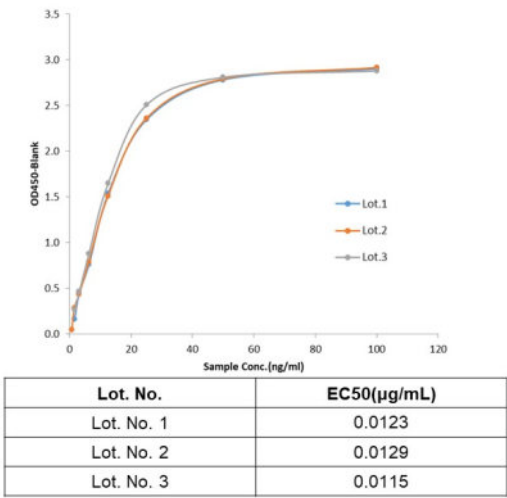


Human CD47 Protein, His Tag (MALS verified)

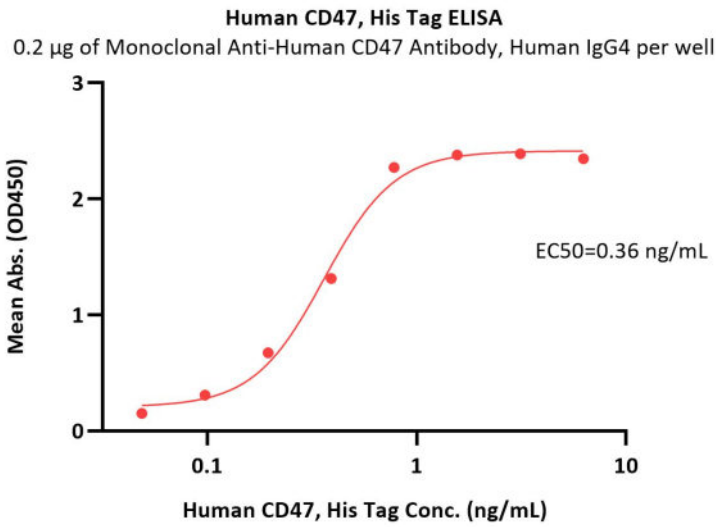
Catalog # CD7-H5227



Batch consistency

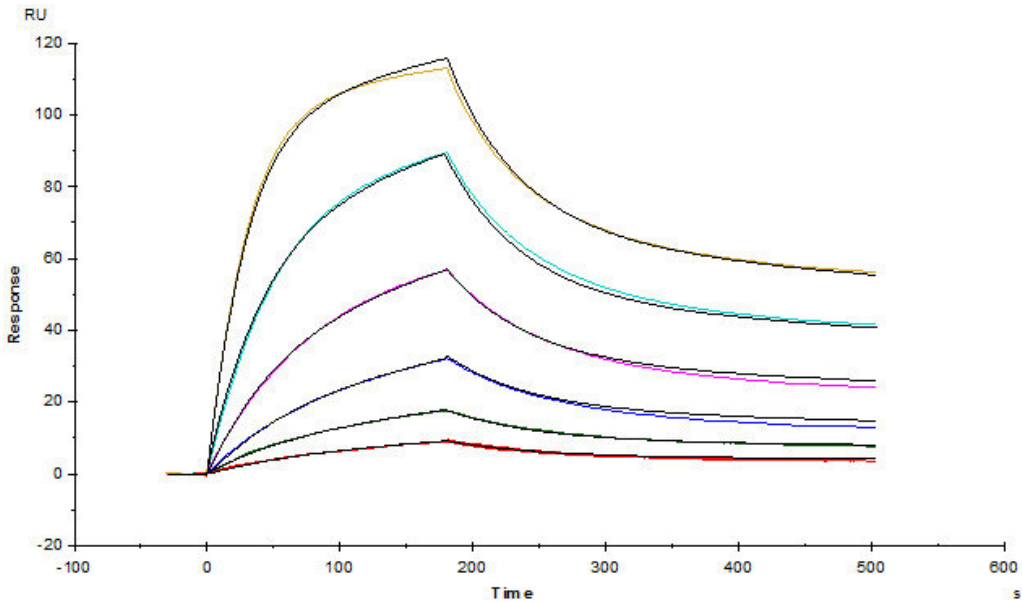


Immobilized Human SIRP alpha, Fc Tag (Cat. No. SIA-H5251) at 5 µg/mL (100 µL/well) can bind Human CD47, His Tag (Cat. No. CD7-H5227) with a linear range of 31-125 ng/mL (QC tested).



Immobilized Monoclonal Anti-Human CD47 Antibody, Human IgG4 at 2 µg/mL (100 µL/well) can bind Human CD47, His Tag (Cat. No. CD7-H5227) with a linear range of 0.1-0.8 ng/mL (Routinely tested).

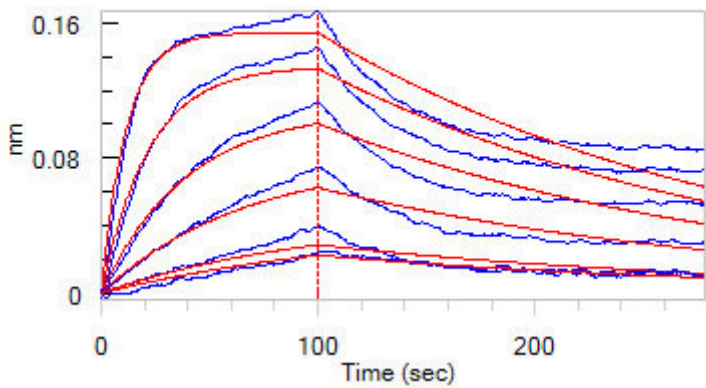
Bioactivity-SPR



Anti-Human CD47 MAb (Human IgG4) captured on CM5 chip via Anti-Human IgG Fc antibodies surface, can bind Human CD47, His Tag (Cat. No. CD7-H5227) with an affinity constant of 1.66 nM as determined in a SPR assay (Biacore T200) (Routinely tested).



Bioactivity-BLI



Loaded Anti-Human CD47 MAb (Human IgG4) on AHC Biosensor, can bind Human CD47, His Tag (Cat. No. CD7-H5227) with an affinity constant of 6.18 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Leukocyte surface antigen CD47 is also known as Antigenic surface determinant protein OA3, Integrin-associated protein (IAP) and Protein MER6. CD47 contains 1 Ig-like V-type (immunoglobulin-like) domain. CD47 is very broadly distributed on normal adult tissues. CD47 has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins and plays an important role in memory formation and synaptic plasticity in the hippocampus by similarity. CD47 is the receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. CD47 Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation.

