



Synonym

CD47,MER6,IAP,OA3

Source

Cynomolgus / Rhesus macaque CD47, His Tag (CD7-C52H1) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Glu 141 (Accession # <u>F7A802-1</u>). In the region Gln 19 - Glu 141, the AA sequence of Cynomolgus and Rhesus macaque CD47 are homologus.

Predicted N-terminus: Gln 19

Molecular Characterization

CD47(Gln 19 - Glu 141) F7A802-1

Poly-his

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

The protein has a calculated MW of 15.8 kDa. The protein migrates as 30-50 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

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 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

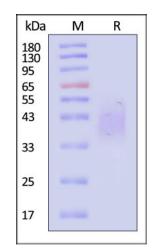
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

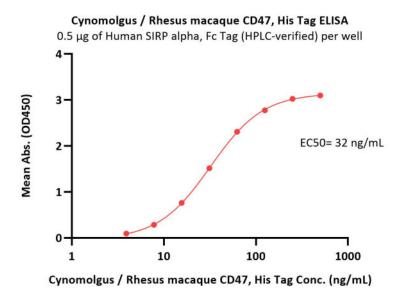


Cynomolgus / Rhesus macaque CD47, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA





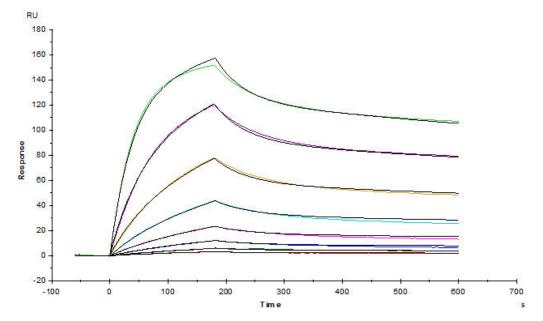


Immobilized Human SIRP alpha, Fc Tag (HPLC-verified) (Cat. No. SIA-H5251) at 5 μ g/mL (100 μ L/well) can bind Cynomolgus / Rhesus macaque CD47, His Tag (Cat. No. CD7-C52H1) with a linear range of 4-63 μ g/mL (QC tested).

Cynomolgus / Rhesus macaque CD47, His Tag ELISA 0.2 μg of Anti-CD47, Human IgG4 per well 2 EC50=2.01 ng/mL 1 1 10 Cynomolgus / Rhesus macaque CD47, His Tag Con. (ng/mL)

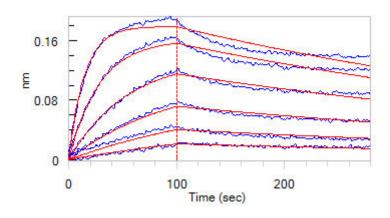
Immobilized Anti-CD47, Human IgG4 at 2 μ g/mL (100 μ L/well) can bind Cynomolgus / Rhesus macaque CD47, His Tag (Cat. No. CD7-C52H1) with a linear range of 0.2-5 ng/mL (Routinely tested).

Bioactivity-SPR



Anti-CD47 Mab (Human IgG4) captured on CM5 chip via anti-human IgG Fc antibodies surface, can bind Cynomolgus/Rhesus macaque CD47, His Tag (Cat. No. CD7-C52H1) with an affinity constant of 1.8 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 Cynomolgus / Rhesus macaque CD47, His Tag (Cat. No. CD7-C52H1) with an



Cynomolgus / Rhesus macaque CD47 Protein, His Tag

Catalog # CD7-C52H1



affinity constant of 2.93 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.

Clinical and Translational Updates

