Mouse CD47 Protein, Fc Tag

Catalog # CD7-M5251

Synonym

CD47,MER6,IAP,OA3

Source

Mouse CD47, Fc Tag(CD7-M5251) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Lys 140 (Accession # Q61735).
Predicted N-terminus: Gln 19

Molecular Characterization

CD47(Gln 19 - Lys 140) Q61735	Fc(Glu 99 - Lys 330) P01857

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

The protein has a calculated MW of 39.9 kDa. The protein migrates as 50-66 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
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

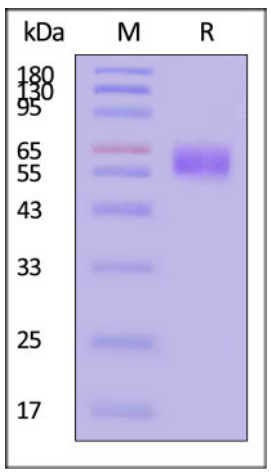
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

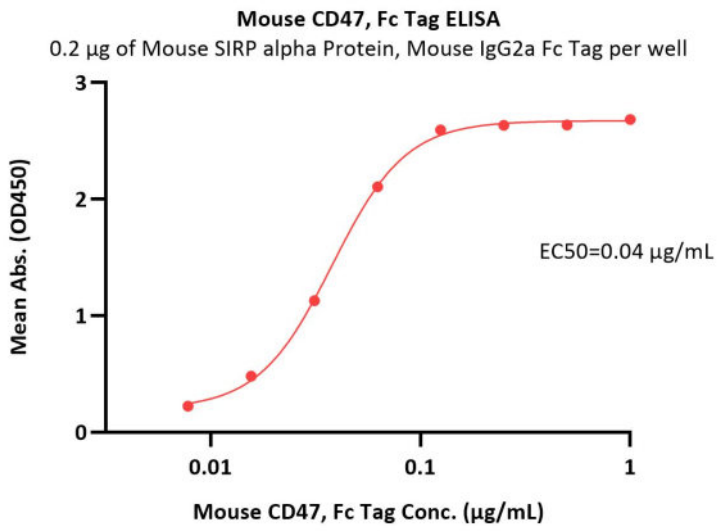
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse CD47, 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% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized Mouse SIRP alpha Protein, Mouse IgG2a Fc Tag (Cat. No. SIA-M5252) at 2 μg/mL (100 μL/well) can bind Mouse CD47, Fc Tag (Cat. No. CD7-M5251) with a linear range of 0.008-0.063 μg/mL (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