

Synonym

CD47, MER6, IAP, OA3

Source

Rat CD47, Fc Tag (CD7-R5256) is expressed from human 293 cells (HEK293).

It contains AA Gln 19 - Lys 140 (Accession # [P97829](#)).

Predicted N-terminus: Gln 19

Molecular Characterization

CD47(Gln 19 - Lys 140) P97829	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 40.4 kDa. As a result of glycosylation, the protein migrates as 55-67 kDa under reducing (R) condition, and 100-130 kDa under non-reducing (NR) condition (SDS-PAGE).

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. Normally trehalose is added as protectant before lyophilization.

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.

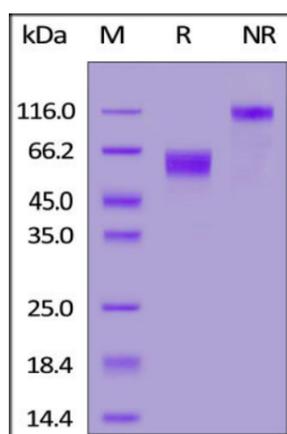
Storage

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

Please avoid repeated freeze-thaw cycles.

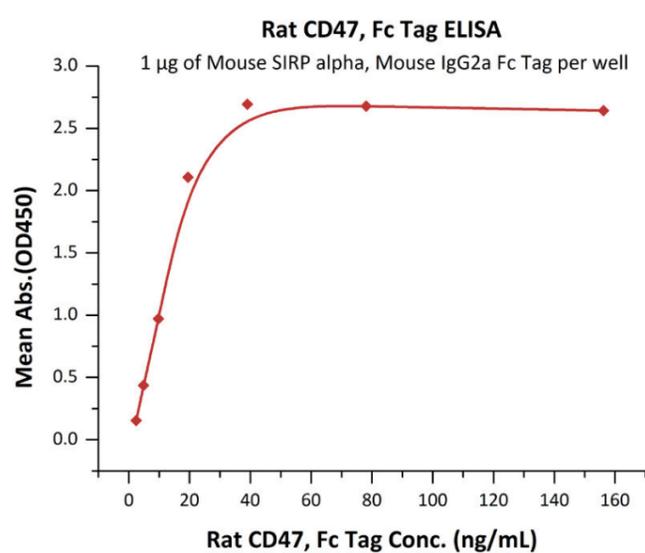
This product is stable after storage at:

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

SDS-PAGE

Rat CD47, Fc Tag on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Mouse SIRP alpha, Mouse IgG2a Fc Tag (Cat. No. [SIA-M5252](#)) at 10 µg/mL (100 µL/well) can bind Rat CD47, Fc Tag (Cat. No. [CD7-R5256](#)) with a linear range of 2-20 ng/mL (QC 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.

References

- (1) [Lindberg F.P., et al., 1993, J. Cell Biol. 123:485-496.](#)
- (2) [Latour S., et al., 2001, J. Immunol. 167:2547-2554.](#)
- (3) [Piccio L., et al., 2005, Blood 105:2421-2427.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.