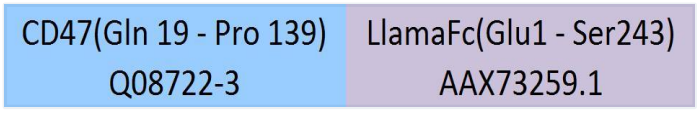
Human CD47 Protein, Llama IgG2b Fc Tag, low endotoxin

Catalog # CD7-H5251

For Research Use Only

Description

Source	Human CD47, Llama IgG2b Fc Tag, low endotoxin (CD7-H5251) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Pro 139 (Accession # Q08722-3). Predicted N-terminus: Gln 19
Predicted N-terminus	Gln 19
Protein Structure	
Molecular Characterization	This protein carries a llama IgG2b Fc tag at the C-terminus. The protein has a calculated MW of 41.6 kDa. The protein migrates as 60-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.
Endotoxin	Less than 0.01 EU per μg by the LAL method.
Purity	>95% as determined by SDS-PAGE.

Formulation and Storage

Formulation	Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 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. No activity loss was observed after storage at: • 4-8℃ for 12 months in lyophilized state; • -70℃ for 3 months under sterile conditions after reconstitution.

Background

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 at ***TechSupport@acrobiosystems.com*** , if you have any questions about this product.

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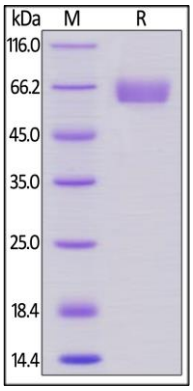
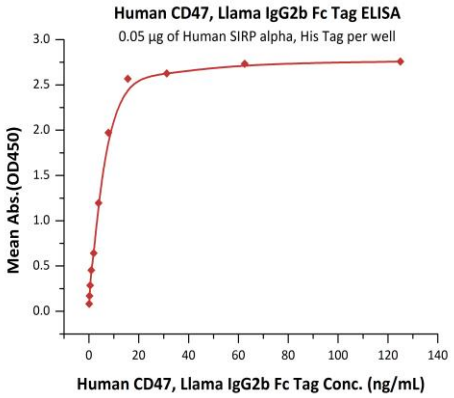
Assay Data

SDS-PAGE Data



Human CD47, Llama IgG2b Fc Tag, low endotoxin on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity Data



Immobilized Human SIRP alpha, His Tag (Cat. No. SIA-H5225) at 0.5 μg/mL (100 μL/well) can bind Human CD47, Llama IgG2b Fc Tag, low endotoxin (Cat. No. CD7-H5251) with a linear range of 0.1-8 ng/mL (QC tested).

Please note that there may be a cross-reaction between anti-human IgG Fc antibodies and llama IgG Fc tag, also between anti-llama IgG Fc antibodies and human IgG Fc tag.