

### **Synonym**

CD47,MER6,IAP,OA3

#### Source

FITC-Labeled Human CD47, His Tag(CD7-HF2H3) is expressed from human 293 cells (HEK293). It contains AA Gln 19 - Pro 139 (Accession # Q08722-3). Predicted N-terminus: Gln 19

### **Molecular Characterization**

CD47(Gln 19 - Pro 139) Q08722-3

Poly-his

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

The protein has a calculated MW of 15.6 kDa. The protein migrates as 35-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

## Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

### **Protein Ratio**

The FITC to protein molar ratio is 2-5.

## **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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**

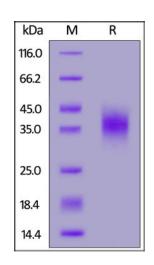
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and 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**





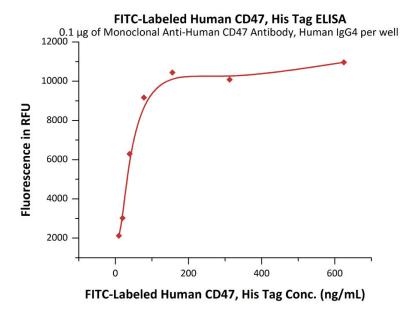
## FITC-Labeled Human CD47 Protein, His Tag





FITC-Labeled 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 90%.

## **Bioactivity-ELISA**



Immobilized Monoclonal Anti-Human CD47 Antibody, Human IgG4 at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind FITC-Labeled Human CD47, His Tag (Cat. No. CD7-HF2H3) with a linear range of 10-78 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.

# **Clinical and Translational Updates**

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

