

HUMAN CD47 PROTEIN, MFC-HIS TAG

Cat.#: 11136

Product Name: Human CD47 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: CD47;MER6;IAP;OA3

Target: CD47

UNIPROT ID: Q08722

Description: Recombinant human CD47 protein with C-terminal mouse Fc and 6xHis tag

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.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 60 kDa after removal of the signal peptide.

Molecular Characterization: CD47(Gln19-Gln141) CD47(Val198-Ala207) CD47(Ser257-Gly268) mFc(Pro99-Lys330) 6xHis tag

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

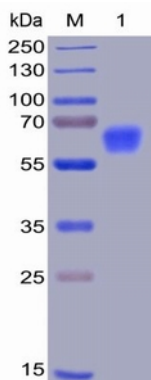


Figure 1. Human CD47, mFc-His Tag on SDS-PAGE under reducing condition.

Human CD47, mFc-His tagged protein ELISA

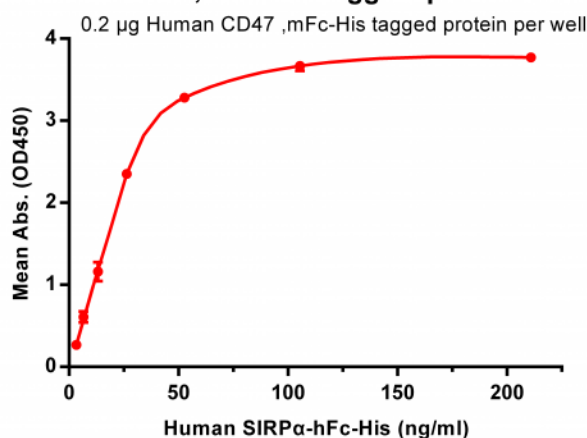


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human CD47, mFc-His tagged protein (11136) can bind its native ligand Human SIRPα, hFc-His tagged protein 11137 in a linear range of 3.3-26.37 ng/ml.

Human CD47, mFc-His Tagged protein ELISA

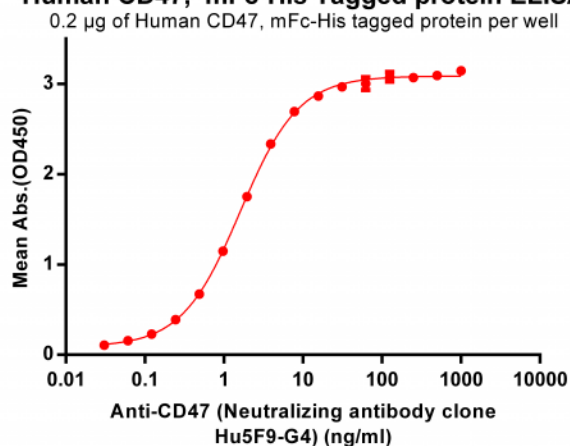


Figure 3. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human CD47, mFc-His tagged protein (11136) can bind Anti-CD47 (Neutralizing antibody clone Hu5F9-G4) 28010 in a linear range of 0.061-1.606 ng/ml.

Human CD47, mFc-His tagged protein ELISA

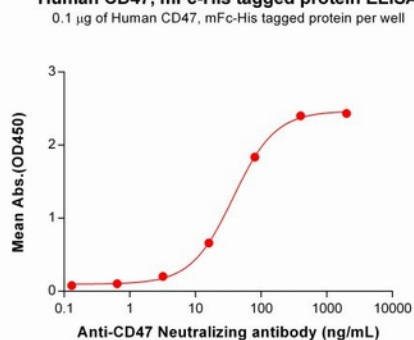


Figure 4. ELISA plate pre-coated by 1 µg/ml (100 µl/well) Human CD47, mFc-His tagged protein (11136) can bind Anti-CD47 Neutralizing antibody 28058 in a linear range of 3.2-80.0 ng/ml.