DATASHEET
Version 20181206

CD47 Fc Chimera, Human

Cat. No.: Z03418-1

Size: 1.0 mg

Synonyms: CD47; MER6; IAP; OA3

Description:

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 a 40□60 kDa variably glycosylated atypical member of the immunoglobulin superfamily and an integral membrane protein that consists of a 123 amino acid (aa) extracellular domain (ECD) with a single Ig-like domain, five membrane-spanning regions with short intervening loops, and a 34 aa C-terminal cytoplasmic tail. 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.
Recombinant Human CD47 Fc Chimera produced in HEK293 cells is a polypeptide chain containing 353 amino acids with the C-termimal human IgG1 Fc fragment. A fully biologically active molecule, rhCD47 has a molecular mass of 58 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

Gln^{19}-Pro^{139} (Accession #: Q08722), expressed with a C-terminal human IgG1 Fc fragment.

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00001 QLLFNKTKSV EFTFCNDTVV IPCFVTNMEA QNTTEVYVKW
00041 KFKGRDIYTF DGALNKSTVP TDFSSAKIEV SQLLKGDASL
00081 KMDKSDAVSH TGNYTCEVTE LTREGETIIE LKYRVVSWFS
00121 P
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Source: *HEK293*

Biological Activity: Immobilized SIRPa-His, Human (Cat.No.Z03421) at 2μg/mL (100 μl/well), can bind CD47 Fc Chimera, Human (Z03418) with a linear range of 0.25-185 ng/mL.

Molecular Weight: 60-65 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS.

Reconstitution: Reconstituted in ddH_2O or PBS at 100 μg/ml.

Purity: > 97% as analyzed by reducing SDS-PAGE.

Endotoxin Level: < 0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant CD47 Fc Chimera, Human remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human CD47 Fc Chimera should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

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