

Rev03
Update: Dec,14,2021

DATASHEET

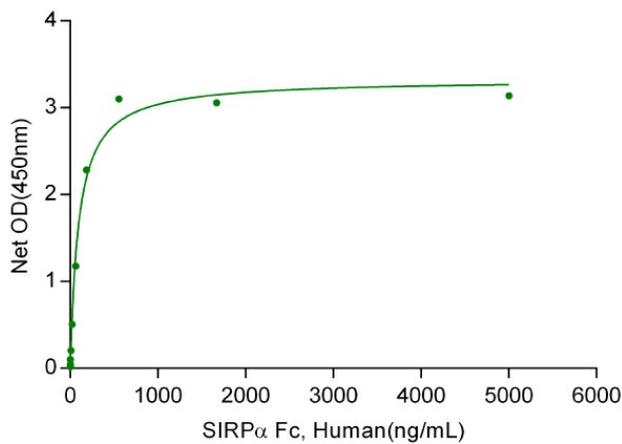
CD47, His, Human

Cat. No.: Z03419

Product Introduction

Species	Human
Protein Construction	
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	Immobilized CD47, His, Human (Cat. No.: Z03419) at 2.0 μg/ml (100 μl/well), can bind SIRPa Fc Chimera, Human (Cat. No.: Z03420).
Expression System	HEK 293
Apparent Molecular Weight	35~40 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for 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.

Examples



Immobilized CD47, His, Human at 2 $\mu\text{g/mL}$ (100 $\mu\text{l/well}$), can bind SIRP α Fc Chimera, Human (Cat.No.Z03420) with a linear range of 0.25-185 ng/mL.

Background

Target 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 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.

Synonyms : CD47; MER6; IAP; OA3

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.