

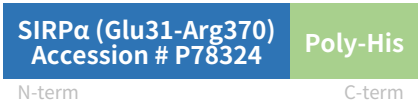
Rev03  
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**DATASHEET**

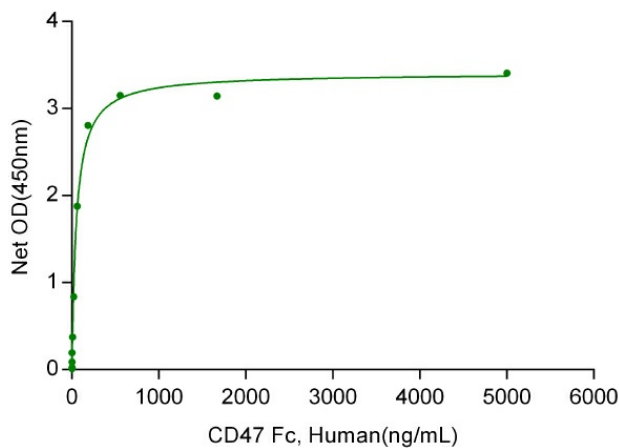
# SIRP $\alpha$ , His, Human

Cat. No.: Z03421

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	
<b>Purity</b>	> 95% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	< 0.2 EU/ $\mu$ g of protein by gel clotting method
<b>Biological Activity</b>	Immobilized SIRP $\alpha$ -His, Human at 2.0 $\mu$ g/ml (100 $\mu$ l/well), can bind CD47 Fc Chimera, Human (Cat. No.: Z03418) with a linear range of 0.25-185.0 ng/ml.
<b>Expression System</b>	HEK 293
<b>Apparent Molecular Weight</b>	50~55 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS, 5% trehalose and mannitol.
<b>Reconstitution</b>	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 <sub>2</sub> O or PBS up to 100 $\mu$ g/ml.
<b>Storage &amp; Stability</b>	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 SIRPa-His, Human(Cat.No.Z03418) at 2  $\mu\text{g}/\text{mL}$  (100  $\mu\text{l}/\text{well}$ ), can bind CD47 Fc Chimera, Human (Z03418) with a linear range of 0.25-185 ng/mL.

## Background

**Target Background :** Signal regulatory protein alpha (SIRP $\alpha$ , designated CD172a), is also known as CD172 antigen-like family member A (CD172a), also called SHPS-1 (SHP substrate 1) and previously, MyD-1 (Myeloid/Dendritic-1), which is a monomeric about 90kDa type I transmembrane glycoprotein that belongs to the SIRP/SHPS (CD172) family of the immunoglobulin superfamily. SIRP $\alpha$  is Ubiquitous and highly expressed in brain. SIRPA/CD172a is immunoglobulin-like cell surface receptor for CD47 and acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. SIRPA/SHPS-1 supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment and may play a key role in intracellular signaling during synaptogenesis and in synaptic function by similarity. SIRP $\alpha$  recognition of surfactants SP-A and SP-D in the lung can inhibit alveolar macrophage cytokine production.

**Synonyms :** CD172 antigen-like family member A; CD172a antigen; CD172a

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