# Mouse/Rat SIRPα/CD172a Antibody

Antigen Affinity-purified Polyclonal Sheep IgG

Catalog Number: AF7307

## DESCRIPTION

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|---|---|
| **Species Reactivity** | Mouse/Rat |
| **Specificity** | Detects mouse and rat SIRPα/CD172a in Western blots. |
| **Source** | Polyclonal Sheep IgG |
| **Purification** | Antigen Affinity-purified |
| **Immunogen** | Mouse myeloma cell line NS0-derived recombinant rat SIRPα/CD172a<br>Lys32-Asn373<br>Accession # P97710 |
| **Formulation** | Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS. |

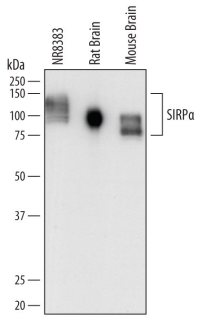
## APPLICATIONS

**Please Note:** *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

| | Recommended Concentration | Sample |
|---|---|---|
| **Western Blot** | 0.2 µg/mL | See Below |

## DATA

**Western Blot**




**Detection of Mouse and Rat SIRPα/CD172a by Western Blot.** Western blot shows lysates of NR8383 rat alveolar macrophage cell line, rat brain tissue, and mouse brain tissue. PVDF membrane was probed with 0.2 µg/mL of Sheep Anti-Mouse/Rat SIRPα/CD172a Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7307) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). Specific bands were detected for SIRPα/CD172a at approximately 75-140 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

## PREPARATION AND STORAGE

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| **Reconstitution** | Sterile PBS to a final concentration of 0.2 mg/mL. |
| **Shipping** | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| **Stability & Storage** | **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**<br>● 12 months from date of receipt, -20 to -70 °C as supplied.<br>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.<br>● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

## BACKGROUND

SIRPα (Signal regulatory protein alpha; also CD172a, Shps1 and Bit) is a variably glycosylated, 85-120 kDa member of the SIRP 'family' of proteins. It is expressed on neurons, macrophages, monocytes, granulocytes and dendritic cells. SIRPα is phosphorylated/activated in response to cell adhesion. This may, or may not, involve binding to known ligands CD47, SP-A and SP-D. Following phosphorylation, SIRPα binds to SHP-1 and -2, resulting in the negative regulation of immune system activity. Mature rat SIRPα is a 478 amino acid (aa) type I transmembrane glycoprotein. It contains a 342 aa extracellular region (aa 32-373) that possesses one V-type and two C1-type Ig-like domains. Its cytoplasmic domain possesses two ITIMs that interact with protein phosphatases. There is one potential splice variant that shows a four aa insertion after Gln424. Over aa 32-373, rat SIRPα shares 63% and 73% aa sequence identity with human and mouse SIRPα, respectively.