

DESCRIPTION

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 Lys32-Asn373 Accession # P97710
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

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