

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SIRP α /CD172a in direct ELISAs and Western blots. In direct ELISAs, 50-100% cross-reactivity with recombinant human (rh) SIRP β 1 and no cross-reactivity with rhSIRP β 2 is observed. In Western blots, approximately 10% cross-reactivity with rhSIRP β 1 and no cross-reactivity with rhSIRP β 2 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 602411
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human SIRP α /CD172a Gly27-Asn370 (predicted) Accession # P78324
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 μ g/10 ⁶ cells	U937 human histiocytic lymphoma cell line

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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

SIRP α (Signal regulatory protein alpha; also SHPS1 and BIT) is a variably glycosylated 90-120 kDa member of the SIRP family of proteins. It is widely expressed, being found on neurons, microglia/macrophages, endothelium, and fibroblasts. SIRP α has a variety of functions, including presynaptic organization, inhibition of integrin action, and induction of myogenesis. It binds to CD47 and likely other ligands. Mature human SIRP α is a 477 amino acid (aa) type I transmembrane glycoprotein. It contains an extracellular region (aa 27-372) that shows one V-type Ig-like (aa 32-137) and two C2-type Ig-like domains (aa 147-347). Its cytoplasmic domain possesses two ITIMs which interact with protein tyrosine phosphatases. There is one alternative start site at Met102 plus a four aa insertion after Gln421. Over aa 27-370, human SIRP α shares 61% aa identity with mouse SIRP α .

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