

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 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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 .

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.