SANTA CRUZ BIOTECHNOLOGY, INC.

SIRP-γ (OX119): sc-53114



BACKGROUND

SIRPs (signal-regulatory proteins) are a family of transmembrane glycoproteins that were identified by their association with the Src homology 2 domain-containing protein-tyrosine phosphatase SHP-2 in response to Insulin. The SIRP family negatively regulates the PI 3-K pathway, which may diminish EGFR-mediated motility and survival phenotypes that contribute to transformation of certain cell types. SIRP- α 1 is a transmembrane protein which contains an extracellular portion with three immunoglobulin-like structures and a cyto-plasmic region with four potential tyrosine phosphorylation sites. SIRP- α 1 is a substrate for activated receptor tyrosine kinases. In its tyrosine phosphorylated form, SIRP-a1 binds to SH-PTP2 through SH2 interactions and acts as an SH-PTP2 substrate. SIRP- α 1 has been shown to have negative regulatory effects on cellular responses induced by growth factors, oncogenes and insu-lin. SIRP-B1 shares extensive sequence homology with SIRP- α 1 in its extracellular portion but lacks the cytoplasmic portion. SIRP- γ , originally designated SIRP-B2 (SIRP-B2, CD172g) has unique characteristics from both the α and β versions. SIRP- γ is expressed on the majority of T cells and a proportion of B cells. CD47 associates with SIRP-y, and this interaction signals unidirectionally only.

REFERENCES

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STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: SIRPG (human) mapping to 20p13.

SOURCE

SIRP- γ (OX119) is a mouse monoclonal antibody raised against recombinant SIRP- γ of human origin.

PRODUCT

Each vial contains 200 μ g lgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SIRP- γ (OX119) is available conjugated to agarose (sc-53114 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-53114 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53114 PE), fluorescein (sc-53114 FITC), Alexa Fluor[®] 488 (sc-53114 AF488), Alexa Fluor[®] 546 (sc-53114 AF546), Alexa Fluor[®] 594 (sc-53114 AF594) or Alexa Fluor[®] 647 (sc-53114 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-53114 AF680) or Alexa Fluor[®] 790 (sc-53114 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

SIRP- γ (OX119) is recommended for detection of SIRP- γ of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and flow cytometry (1 μ g per 1 x 10⁶ cells); may cross-react with over-expressed SIRP- α and SIRP- β .

Suitable for use as control antibody for SIRP- γ siRNA (h): sc-76499, SIRP- γ shRNA Plasmid (h): sc-76499-SH and SIRP- γ shRNA (h) Lentiviral Particles: sc-76499-V.

Molecular Weight of SIRP-y: 55 kDa.

Positive Controls: SIRP-y (h): 293T Lysate: sc-116900.

DATA





SIRP- γ (DX119): sc-53114. Western blot analysis of SIRP- γ expression in non-transfected: sc-117752 (A) and human SIRP- γ transfected: sc-116900 (B) 293T whole cell lysates. Detection reagent used: m-lgG_1 BP-HRP: sc-525408.

SIRP- γ (0X119): sc-53114. Indirect FCM analysis of human peripheral blood leukocytes stained with SIRP- γ (0X119), followed by PE-conjugated goat anti-mouse IgG₁: sc-3764. Black line histogram represents the isotype control, normal mouse IgG₁: sc-3877.

RESEARCH USE

For research use only, not for use in diagnostic procedures.