SANTA CRUZ BIOTECHNOLOGY, INC.

ISY1 (G-6): sc-398437

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Spliceosomes are multi-protein complexes that are composed of snRNPs (small nuclear ribonucleoproteins) and a variety of associated protein factors, all of which work in concert to regulate the splicing of pre-mRNA, a critical step in the posttranscriptional regulation of gene expression. ISY1, a 331 amino acid protein, is a nonessential member of the spliceosome C complex. The gene encoding ISY1 exists as three isoforms as a result of alternative splicing events and maps to chromosome 3, which comprises over 1,100 genes that include a chemokine receptor gene cluster as well as a variety of human cancer related loci.

CHROMOSOMAL LOCATION

Genetic locus: ISY1 (human) mapping to 3q21.3; Isy1 (mouse) mapping to 6 D1.

SOURCE

ISY1 (G-6) is a mouse monoclonal antibody raised against amino acids 1-139 mapping at the N-terminus of ISY1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ISY1 (G-6) is available conjugated to agarose (sc-398437 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398437 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398437 PE), fluorescein (sc-398437 FITC), Alexa Fluor® 488 (sc-398437 AF488), Alexa Fluor® 546 (sc-398437 AF546), Alexa Fluor® 594 (sc-398437 AF594) or Alexa Fluor® 647 (sc-398437 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398437 AF680) or Alexa Fluor® 790 (sc-398437 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ISY1 (G-6) is recommended for detection of ISY1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ISY1 (G-6) is also recommended for detection of ISY1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for ISY1 siRNA (h): sc-77922, ISY1 siRNA (m): sc-146304, ISY1 shRNA Plasmid (h): sc-77922-SH, ISY1 shRNA Plasmid (m): sc-146304-SH, ISY1 shRNA (h) Lentiviral Particles: sc-77922-V and ISY1 shRNA (m) Lentiviral Particles: sc-146304-V.

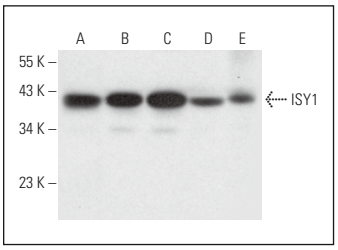
Molecular Weight of ISY1: 38/35/33 kDa.

Positive Controls: RT-4 whole cell lysate: sc-364257, U-251-MG whole cell lysate: sc-364176 or Hep G2 cell lysate: sc-2227.

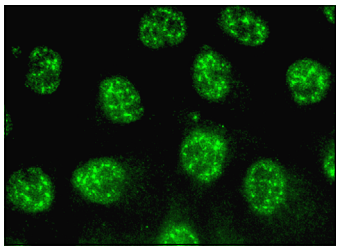
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ISY1 (G-6): sc-398437. Western blot analysis of ISY1 expression in RT-4 (**A**), U-251-MG (**B**) and Hep G2 (**C**) whole cell lysates and human liver (**D**) and human tonsil (**E**) tissue extracts.



ISY1 (G-6): sc-398437. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Onyango, D.O., et al. 2016. Tetratricopeptide repeat factor XAB2 mediates the end resection step of homologous recombination. Nucleic Acids Res. 44: 5702-5716.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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