# ISY1 (K-15): sc-99473



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.

#### **REFERENCES**

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- Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. Proc. Natl. Acad. Sci. USA 97: 206-211.
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- Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. Genomics 85: 36-47.
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# CHROMOSOMAL LOCATION

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

# **SOURCE**

ISY1 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ISY1 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99473 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **RESEARCH USE**

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

#### **APPLICATIONS**

ISY1 (K-15) is recommended for detection of ISY1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

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.

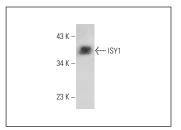
Molecular Weight of ISY1: 38/35/33 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138 or SH-SY5Y cell lysate: sc-3812.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# DATA



ISY1 (K-15): sc-99473. Western blot analysis of ISY1 expression in NIH/3T3 nuclear extract.

### **STORAGE**

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



Try **ISY1 (G-6): sc-398437**, our highly recommended monoclonal alternative to ISY1 (K-15).