SANTA CRUZ BIOTECHNOLOGY, INC.

hnRNP Q (Y-13): sc-69572



BACKGROUND

Pre-mRNA splicing is a critical step in the posttranscriptional regulation of gene expression. Heterogeneous nuclear ribonucleoprotein Q (hnRNP Q) is involved in RNA processing and is necessary for efficient pre-mRNA splicing. hnRNP is widely expressed and developmentally regulated. hnRNP Q interacts with survival motor neuron protein (SMN). Loss of function of SMN results in spinal muscular atrophy, a common neurodegenerative disease. The most common deletion in SMN genes disrupts the interaction between SMN and hnRNP Q. hnRNP Q is upregulated after midnight, and this upregulation correlates with an abrupt decline in AANAT, the key enzyme in melatonin synthesis. Rhythmic AANAT mRNA degradation mediated in part by hnRNP Q implicates this enzyme in the regulation of circadian oscillation.

CHROMOSOMAL LOCATION

Genetic locus: SYNCRIP (human) mapping to 6q14.3; Syncrip (mouse) mapping to 9 E3.1.

SOURCE

hnRNP Q (Y-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of hnRNP Q of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-69572 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-69572 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

hnRNP Q (Y-13) is recommended for detection of hnRNP Q of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

hnRNP Q (Y-13) is also recommended for detection of hnRNP Q in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for hnRNP Q siRNA (h): sc-72096, hnRNP Q siRNA (m): sc-72097, hnRNP Q shRNA Plasmid (h): sc-72096-SH, hnRNP Q shRNA Plasmid (m): sc-72097-SH, hnRNP Q shRNA (h) Lentiviral Particles: sc-72096-V and hnRNP Q shRNA (m) Lentiviral Particles: sc-72097-V.

hnRNP Q (Y-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of hnRNP Q: 70 kDa.

Positive Controls: A549 cell lysate: sc-2413 or WI-38 whole cell lysate: sc-364260.

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



hnRNP Q expression in A549 whole cell lysate.

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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed

Try hnRNP Q (I8E4): sc-56703 or hnRNP Q (G-6): sc-271016, our highly recommended monoclonal alternatives to hnRNP Q (Y-13).