

hnRNP Q (H-60): sc-134476

BACKGROUND

Pre-mRNA splicing is a critical step in the post-transcriptional 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, HNRNPR (human) mapping to 1p36.12; Syncrip (mouse) mapping to 9 E3.1, Hnrnp (mouse) mapping to 4 D3.

SOURCE

hnRNP Q (H-60) is a rabbit polyclonal antibody raised against amino acids 373-432 mapping within an internal region of hnRNP Q of human origin.

PRODUCT

Each vial contains 200 µg 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-134476 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

hnRNP Q (H-60) is recommended for detection of hnRNP Q, and to a lesser extent, hnRNP R 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).

hnRNP Q (H-60) is also recommended for detection of hnRNP Q, and to a lesser extent, hnRNP R in additional species, including equine, canine, bovine, porcine and avian.

hnRNP Q (H-60) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of hnRNP Q: 70 kDa.

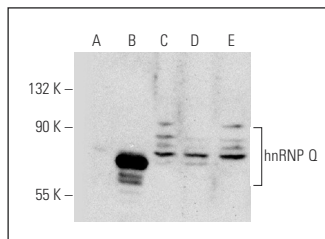
Molecular Weight of hnRNP R: 82 kDa.

Positive Controls: hnRNP Q (h): 293T Lysate: sc-115273, 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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



hnRNP Q (H-60): sc-134476. Western blot analysis of hnRNP Q expression in non-transfected 293T: sc-117752 (A), human hnRNP Q transfected 293T: sc-115273 (B), A549 (C), WI-38 (D) and Hep G2 (E) whole cell lysates.

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.



Try **hnRNP Q (18E4): sc-56703** or **hnRNP Q (G-6): sc-271016**, our highly recommended monoclonal alternatives to hnRNP Q (H-60).