**BACKGROUND**

Pre-mRNA splicing is a critical step in the post-transcriptional regulation of gene expression. Heterogeneous nuclear ribonucleoprotein Q (hnRNQ) is involved in RNA processing and is necessary for efficient pre-mRNA splicing. hnRNQ is widely expressed and developmentally regulated. hnRNQ 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 hnRNQ. hnRNQ 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 hnRNQ.

hnRNQ 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 hnRNQ implicates this enzyme in the regulation of circadian oscillation.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

hnRNQ (I8E4) is a mouse monoclonal antibody raised against recombinant hnRNQ of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

hnRNQ (I8E4) is recommended for detection of hnRNQ of mouse, rat, human and *Xenopus laevis* 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)) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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

Molecular Weight of hnRNQ: 70 kDa.

Positive Controls: A549 cell lysate: sc-2413, HeLa whole cell lysate: sc-2200 or hnRNQ (h): 293T Lysate: sc-115273.

**STORAGE**

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

**DATA**

hnRNQ (I8E4): sc-56703. Western blot analysis of hnRNQ expression in A549 (A), WI-38 (B), Hep G2 (C), HeLa (D), T-47D (E) and HT-29 (F) whole cell lysates.

hnRNQ (I8E4): sc-56703. Western blot analysis of hnRNQ expression in non-transfected 293T: sc-117752 (A), human hnRNQ transfected 293T: sc-115273 (B) and *Xenopus* (C) whole cell lysates.

**SELECT PRODUCT CITATIONS**


**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, 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 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.

**RESEARCH USE**

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

**PROTOCOLS**

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