

hnRNP C2 (V-13): sc-10041

BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to pre-mRNA processing and transport, and also bind heterogeneous nuclear RNA (hnRNA), which are the transcripts produced by RNA polymerase II. hnRNP complexes are the major constituents of the spliceosome and in particular, the hnRNP A1 protein is one of the major pre-mRNA/mRNA binding proteins and also one of the most abundant proteins in the nucleus. hnRNP A1 and A2/B1 regulate the processing of pre-mRNA by directly antagonizing the association of various splicing factors and by influencing the splice site selection on pre-mRNA. The majority of hnRNP proteins components are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm. Most hnRNP proteins, including hnRNP C1 and C2, contain one or more RNA binding domains and are implicated in the processing of pre-mRNA. hnRNPs F and H are largely related factors that preferentially associate with poly(rG) regions on RNA. Isoforms of these proteins are often generated by alternative processing of the pre-mRNA and by posttranslational modifications such as phosphorylation on serines and threonines and methylation of arginines.

REFERENCES

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- Gorlach, M., et al. 1994. The determinants of RNA-binding specificity of the heterogeneous nuclear ribonucleoprotein C proteins. *J. Biol. Chem.* 269: 23074-23078.
- Honore, B., et al. 1995. Heterogeneous nuclear ribonucleoproteins H, H', and F are members of a ubiquitously expressed subfamily of related but distinct proteins encoded by genes mapping to different chromosomes. *J. Biol. Chem.* 270: 28780-28789.
- Badolato, J., et al. 1995. Identification and characterization of a novel human RNA-binding protein. *Gene* 166: 323-327.
- Siomi, H., et al. 1995. A nuclear localization domain in the hnRNP A1 protein. *J. Cell Biol.* 129: 551-560.
- Hanamura, A., et al. 1998. Regulated tissue-specific expression of antagonistic pre-mRNA splicing factors. *RNA* 4: 430-444.

CHROMOSOMAL LOCATION

Genetic locus: HNRNPC (human) mapping to 14q11.2; Hnrnpc (mouse) mapping to 14 C2.

SOURCE

hnRNP C2 (V-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of hnRNP C2 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.

Blocking peptide available for competition studies, sc-10041 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

hnRNP C2 (V-13) is recommended for detection of hnRNP C2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

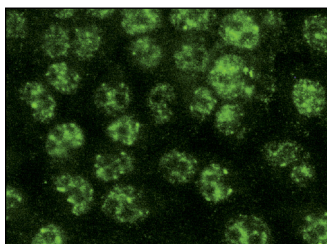
Suitable for use as control antibody for hnRNP C1/C2 siRNA (h): sc-35577, hnRNP C1/C2 siRNA (m): sc-35578, hnRNP C1/C2 shRNA Plasmid (h): sc-35577-SH, hnRNP C1/C2 shRNA Plasmid (m): sc-35578-SH, hnRNP C1/C2 shRNA (h) Lentiviral Particles: sc-35577-V and hnRNP C1/C2 shRNA (m) Lentiviral Particles: sc-35578-V.

Positive Controls: HeLa whole cell lysate: sc-2200.

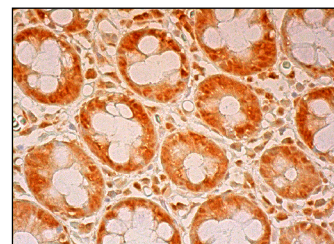
RECOMMENDED SECONDARY REAGENTS

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



hnRNP C2 (V-13): sc-10041. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.



hnRNP C2 (V-13): sc-10041. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing nuclear staining of endothelial cells.

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.