hnRNP D0 (G-10): sc-22369



The Power to Question

BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription, pre-mRNA processing, mature mRNA transport to the cytoplasm and translation. They also bind heterogeneous nuclear RNA (hnRNA), which are the transcripts produced by RNA polymerase II. There are approximately 20 known hnRNP proteins, and their complexes are the major constituents of the spliceosome. The majority of hnRNP proteins components are localized to the nucleus; however some shuttle between the nucleus and the cytoplasm. Two abundant and ubiquitously expressed members of the hnRNP family are hnRNP D0 and hnRNP R. Specifically, the hnRNP D0 protein contains two RNA-binding domains (RBDs), which bind to both RNA and DNA sequences. hnRNP D0 also posesses a transactivator domain and is involved in transcriptional regulation.

REFERENCES

- 1. Badolato, J., et al. 1995. Identification and characterisation of a novel human RNA-binding protein. Gene 166: 323-327.
- 2. Siomi, H. and Dreyfuss, G. 1995. A nuclear localization domain in the hnRNP A1 protein. J. Cell Biol. 129: 551-560.
- Kajita, Y., et al. 1995. The UUAG-specific RNA binding protein, heterogeneous nuclear ribonucleoprotein D0. Common modular structure and binding properties of the 2xRBD-Gly family. J. Biol. Chem. 270: 22167-22175.

CHROMOSOMAL LOCATION

Genetic locus: HNRNPD (human) mapping to 4q21.22; Hnrnpd (mouse) mapping to 5 E4.

SOURCE

hnRNP D0 (G-10) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of hnRNP D0 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-22369 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

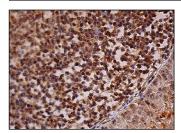
hnRNP D0 (G-10) is recommended for detection of hnRNP D0 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded 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 D0 siRNA (h): sc-37028, hnRNP D0 siRNA (m): sc-37029, hnRNP D0 shRNA Plasmid (h): sc-37028-SH, hnRNP D0 shRNA Plasmid (m): sc-37029-SH, hnRNP D0 shRNA (h) Lentiviral Particles: sc-37028-V and hnRNP D0 shRNA (m) Lentiviral Particles: sc-37029-V.

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 D0 (G-10): sc-22369. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing nuclear and cytoplasmic staining of cells in germinal center, cells in non-germinal center and squamous epithelial 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.



Try **pan hnRNP (C-6): sc-166577**, our highly recommended monoclonal alternative to hnRNP D0 (G-10).

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