U2 snRNP A (D-12): sc-132132



The Power to Overtion

BACKGROUND

Small nuclear ribonucleoproteins, also known as snRNPs, combine with other proteins to form spliceosomes, a complex that catalyzes pre-mRNA splicing. There are two types of spliceosomes: U2 and U12. The U2-type spliceosome is found in all eukaryotes and excises U2-type introns, which account for the majority of pre-mRNA introns. The U12-type spliceosome removes U12-type introns, which comprise less than 1% of all human introns. U2 snRNP A, also known as SNRPA1 or U2A, is a component of the U2 snRNP that forms a complex with U2 snRNP B (U2B). Together, U2 snRNP A and U2 snRNP B form a complex that binds to the U2 snRNA hairpin IV. The configuration of this U2 snRNP A/U2 snRNP B dimer and the subtle variations of a few key residues regulate the snRNP-RNA-binding specificity. U2 snRNP A is a 255 amino acid protein, and 2 isoforms exist as a result of alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: SNRPA1 (human) mapping to 15q26.3; Snrpa1 (mouse) mapping to 7 C.

SOURCE

U2 snRNP A (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of U2 snRNP A 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-132132 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

U2 snRNP A (D-12) is recommended for detection of U2 snRNP A 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).

U2 snRNP A (D-12) is also recommended for detection of U2 snRNP A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for U2 snRNP A siRNA (h): sc-89928, U2 snRNP A siRNA (m): sc-154833, U2 snRNP A shRNA Plasmid (h): sc-89928-SH, U2 snRNP A shRNA Plasmid (m): sc-154833-SH, U2 snRNP A shRNA (h) Lentiviral Particles: sc-89928-V and U2 snRNP A shRNA (m) Lentiviral Particles: sc-154833-V.

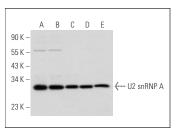
Molecular Weight of U2 snRNP A: 28 kDa.

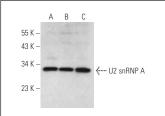
Positive Controls: Jurkat whole cell lysate: sc-2204, U-698-M whole cell lysate: sc-364799 or HeLa whole cell lysate: sc-2200.

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) 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





U2 snRNP A (D-12): sc-132132. Western blot analysis of U2 snRNP A expression in Jurkat (A) and MCF7 (B) nuclear extracts and MCF7 (C), Raji (D) and A549 (E) whole cell Ivsates.

U2 snRNP A (D-12): sc-132132. Western blot analysis of U2 snRNP A expression in HUV-EC-C (**A**), Hep G2 (**B**) and HeLa (**C**) whole cell lysates.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **U2 SnRNP A (B-3):** sc-393804 or **U2 snRNP A (E-12):** sc-390770, our highly recommended monoclonal alternatives to U2 snRNP A (D-12).

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