## BACKGROUND

SF3b is a U2 snRNP-associated protein complex essential for spliceosome assembly. SF3b contains the spliceosomal proteins SAP 49, 130, 145 and 155. SAP 130,145 and 155 associate with one another to form a complex that is present in HeLa nuclear extracts. SAP 49 and 145 are known to interact directly with each other. Unexpectedly, the SAP 49-SAP 145 protein-protein interaction requires the amino-terminus of SAP 49, which contains two RNA-recognition motifs. SAP 49 and SAP 145 interact directly with both U2 snRNP and the pre-mRNA, which suggests that this protein complex plays a role in tethering U2 snRNP to the branch site. U2AF recruits SAP 49 to the branch point sequence during the initial steps of spliceosome assembly. U2AF exists as a heterodimer consisting of U2AF65 and U2AF35 and is required for splicing in vivo.

## CHROMOSOMAL LOCATION

Genetic locus: U2AF1 (human) mapping to 21q22.3; U2af1 (mouse) mapping to 17 B1.

## SOURCE

U2AF35 ( $\mathrm{N}-16$ ) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of U2AF35 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-19961 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA})$.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

U2AF35 (N-16) is recommended for detection of U2AF35 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [ $1-2 \mu \mathrm{~g}$ per $100-500 \mu \mathrm{~g}$ 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); may cross-react with U2AF1L3.

U2AF35 ( $\mathrm{N}-16$ ) is also recommended for detection of U2AF35 in additional species, including equine, canine, bovine and avian.
Suitable for use as control antibody for U2AF35 siRNA (h): sc-37665, U2AF35 siRNA (m): sc-37666, U2AF35 shRNA Plasmid (h): sc-37665-SH, U2AF35 shRNA Plasmid (m): sc-37666-SH, U2AF35 shRNA (h) Lentiviral Particles: sc-37665-V and U2AF35 shRNA (m) Lentiviral Particles: sc-37666-V.
Positive Controls: NIH/3T3 nuclear extract: sc-2138, HeLa nuclear extract: sc-2120 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



U2AF35 (N-16): sc-19961. Western blot analysis of U2AF35 expression in HeLa (A), HEK293 (B), Ramos (C) and Hep G2 (D) whole cell lysates and HeLa (E) and NIH/3T3 (F) nuclear extracts.

## SELECT PRODUCT CITATIONS

1. Heyd, F., et al. 2006. Auxiliary splice factor U2AF26 and transcription factor Gfi-1 cooperate directly in regulating CD45 alternative splicing. Nat. Immunol. 7: 859-867.

## 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 U2AF1L3/35 (D-4): sc-514459, our highly recommended monoclonal alternative to U2AF35 (N-16).

