# U2AF65 (H-300): sc-48804



The Power to Question

#### **BACKGROUND**

SF3b is a U2 snRNP-associated protein complex essential for spliceosome assembly. SF3b contains the spliceosomal proteins SAPs 49, 130, 145 and 155. SAPs 130, 145 and 155 associate with one another to form a complex that is present in HeLa nuclear extracts. SAPs 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: U2AF2 (human) mapping to 19q13.42; U2af2 (mouse) mapping to 7 A1.

#### SOURCE

U2AF65 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of U2AF65 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **STORAGE**

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

## **APPLICATIONS**

U2AF65 (H-300) is recommended for detection of U2AF65 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

U2AF65 (H-300) is also recommended for detection of U2AF65 in additional species, including bovine and equine.

Suitable for use as control antibody for U2AF65 siRNA (h): sc-37667, U2AF65 siRNA (m): sc-37668, U2AF65 shRNA Plasmid (h): sc-37667-SH, U2AF65 shRNA Plasmid (m): sc-37668-SH, U2AF65 shRNA (h) Lentiviral Particles: sc-37667-V and U2AF65 shRNA (m) Lentiviral Particles: sc-37668-V.

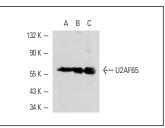
Molecular Weight of U2AF65: 65 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, HeLa nuclear extract: sc-2120 or SK-N-MC nuclear extract: sc-2154.

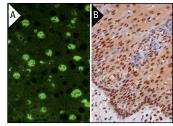
#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## **DATA**







U2AF65 (H-300): sc-48804. Immunofluorescence staining of normal mouse liver frozen section showing nuclear staining (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing nuclear and cytoplasmic staining of squamous epithelial cells (**B**).

#### **SELECT PRODUCT CITATIONS**

- Tsoi, H., et al. 2011. Perturbation of U2AF65/NXF1-mediated RNA nuclear export enhances RNA toxicity in polyQ diseases. Hum. Mol. Genet. 20: 3787-3797.
- Li, S., et al. 2013. Rbm20 regulates titin alternative splicing as a splicing repressor. Nucleic Acids Res. 41: 2659-2672.
- 3. Becerra, S., et al. 2015. Prp40 pre-mRNA processing factor 40 homolog B (PRPF40B) associates with SF1 and U2AF65 and modulates alternative pre-mRNA splicing *in vivo*. RNA 21: 438-457.

# **RESEARCH USE**

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

MONOS Satisfation Guaranteed

Try **U2AF65 (MC3):** sc-53942 or **U2AF65 (D-8):** sc-374333, our highly recommended monoclonal aternatives to U2AF65 (H-300).

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