

UBN-2 (S-16): sc-244558

BACKGROUND

Epstein-Barr virus (EBV)-associated lymphoproliferative disorders frequently develop in patients with AIDS. The major target tissues for EBV infection are B lymphocytes and epithelial cells of the oropharyngeal zone. The protein product of the EBV BZLF1 early gene, EB1, interacts with viral and cellular promoters and transcription factors, thereby modulating the reactivation of EBV infection. The EB1 interacting protein, ubinuclein (UBN-1), is a product of the UBN1 gene and is expressed in the nucleus of human epidermis. The amino terminus of ubinuclein contains the nuclear localization signal whereas the central domain is responsible for the interaction of UBN-1 with the DNA-binding domain of EB1. UBN-2 (Ubinuclein-2) is a 1,347 amino acid protein that is related to UBN-1 and is phosphorylated upon DNA damage, probably by ATR or Atm. There are two isoforms of UBN-2 that are produced as a result of alternative splicing events.

REFERENCES

- Aho, S., et al. 2000. Ubinuclein, a novel nuclear protein interacting with cellular and viral transcription factors. *J. Cell Biol.* 148: 1165-1176.
- Stubbert, B.D. and Marks, T.J. 2007. Mechanistic investigation of intramolecular aminoalkene and aminoalkyne hydroamination/cyclization catalyzed by highly electrophilic, tetravalent constrained geometry 4d and 5f complexes. Evidence for an M-N σ -bonded insertive pathway. *J. Am. Chem. Soc.* 129: 6149-6167.
- Aho, S., et al. 2009. Characterization of the ubinuclein protein as a new member of the nuclear and adhesion complex components (NACOs). *Biol. Cell* 101: 319-334.
- Balaji, S., et al. 2009. HPC2 and ubinuclein define a novel family of histone chaperones conserved throughout eukaryotes. *Mol. Biosyst.* 5: 269-275.

CHROMOSOMAL LOCATION

Genetic locus: UBN2 (human) mapping to 7q34; Ubn2 (mouse) mapping to 6 B1.

SOURCE

UBN-2 (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UBN-2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244558 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

UBN-2 (S-16) is recommended for detection of UBN-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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); non cross-reactive with UBN-1.

UBN-2 (S-16) is also recommended for detection of UBN-2 in additional species, including equine and bovine.

Suitable for use as control antibody for UBN-2 siRNA (h): sc-89533, UBN-2 siRNA (m): sc-142781, UBN-2 shRNA Plasmid (h): sc-89533-SH, UBN-2 shRNA Plasmid (m): sc-142781-SH, UBN-2 shRNA (h) Lentiviral Particles: sc-89533-V and UBN-2 shRNA (m) Lentiviral Particles: sc-142781-V.

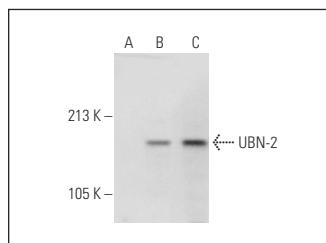
Molecular Weight of UBN-2 isoform 1/2: 146/108 kDa.

Positive Controls: D130059P03Rik (m): 293T Lysate: sc-119629 or mouse brain extract: sc-2253.

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



UBN-2 (S-16): sc-244558. Western blot analysis of UBN-2 expression in non-transfected: sc-117752 (A) and mouse UBN-2 transfected: sc-119629 (B) 293T whole cell lysates and mouse brain tissue extract (C).

PROTOCOLS

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