SANTA CRUZ BIOTECHNOLOGY, INC.

UBN-1 (D-8): sc-515340

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

REFERENCES

1. Giot, J.F., et al. 1991. Transcriptional interference between the EBV transcription factors EB1 and R: both DNA-binding and activation domains of EB1 are required. Nucleic Acids Res. 19: 1251-1258.
2. Baumann, M., et al. 1998. Activation of the Epstein-Barr virus transcription factor BZLF1 by 12-O-tetradecanoylphorbol-13-acetate-induced phosphorylation. J. Virol. 72: 8105-8114.
3. Adamson, A.L. and Kenney, S. 1999. The Epstein-Barr virus BZLF1 protein interacts physically and functionally with the histone acetylase CREB-binding protein. J. Virol. 73: 6551-6558.
4. Aho, S., et al. 2000. Ubinuclein, a novel nuclear protein interacting with cellular and viral transcription factors. J. Cell Biol. 148: 1165-1176.

CHROMOSOMAL LOCATION

Genetic locus: UBN1 (human) mapping to 16p13.3; Ubn1 (mouse) mapping to 16 A1.

SOURCE

UBN-1 (D-8) is a mouse monoclonal antibody raised against amino acids 266-352 mapping within an internal region of UBN-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

UBN-1 (D-8) is available conjugated to agarose (sc-515340 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515340 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515340 PE), fluorescein (sc-515340 FITC), Alexa Fluor® 488 (sc-515340 AF488), Alexa Fluor® 546 (sc-515340 AF546), Alexa Fluor® 594 (sc-515340 AF594) or Alexa Fluor® 647 (sc-515340 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515340 AF680) or Alexa Fluor® 790 (sc-515340 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

UBN-1 (D-8) is recommended for detection of UBN-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

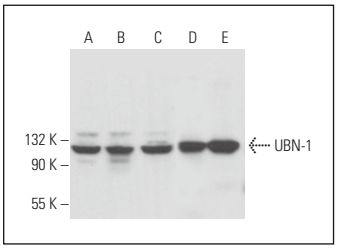
Suitable for use as control antibody for UBN-1 siRNA (h): sc-106663, UBN-1 siRNA (m): sc-154869, UBN-1 shRNA Plasmid (h): sc-106663-SH, UBN-1 shRNA Plasmid (m): sc-154869-SH, UBN-1 shRNA (h) Lentiviral Particles: sc-106663-V and UBN-1 shRNA (m) Lentiviral Particles: sc-154869-V.

Positive Controls: MOLT-4 cell lysate: sc-2233, HeLa whole cell lysate: sc-2200 or Jurkat nuclear extract: sc-2132.

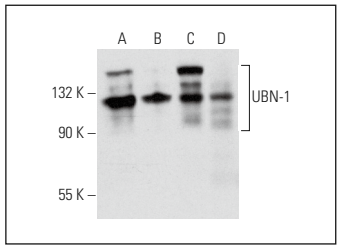
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



UBN-1 (D-8): sc-515340. Western blot analysis of UBN-1 expression in HeLa (**A**), K-562 (**B**) and U-698-M (**C**) whole cell lysates and rat lung (**D**) and rat testis (**E**) tissue extracts.



UBN-1 (D-8): sc-515340. Western blot analysis of UBN-1 expression in MOLT-4 (**A**) and HeLa (**B**) whole cell lysates and Jurkat (**C**) and Hep G2 (**D**) nuclear extracts.

SELECT PRODUCT CITATIONS

1. Yang, Y., et al. 2022. HIRA complex presets transcriptional potential through coordinating depositions of the histone variants H3.3 and H2A.Z on the poised genes in mESCs. Nucleic Acids Res. 50: 191-206.
2. Zhang, M., et al. 2022. Histone chaperone HIRA complex regulates retrotransposons in embryonic stem cells. Stem Cell Res. Ther. 13: 137.

RESEARCH USE

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