

UHRF1 (E-15): sc-79806

BACKGROUND

UHRF1 (ubiquitin-like, containing PHD and RING finger domains, 1), also known as Np95 (nuclear zinc finger protein 95), ICBP90 (inverted CCAAT box-binding protein of 90 kDa) or RNF106, is a transcription and cell cycle regulator belonging to the RING-finger type E3 ubiquitin ligase subfamily. UHRF1 is expressed in bone marrow, thymus, heart, testis and lung, and contains one PHD-type zinc finger, a ubiquitin-like domain, two RING-type zinc fingers and one YDG/SRA domain. Localizing to the nucleus, UHRF1 is believed to function as an E3 ubiquitin-protein ligase that accepts a ubiquitin residue from an E2 ubiquitin-conjugating enzyme and immediately transfers that residue to a protein that is targeted for degradation. By mediating ubiquitination, UHRF1 plays an important role in cellular proliferation. In addition, UHRF1 directly interacts with Dnmt1 (a maintenance DNA methyltransferase) and is required for the stable association of Dnmt1 with chromatin. UHRF1 is overexpressed in cancer cells, suggesting a possible role in carcinogenesis.

REFERENCES

- Hopfner, R., et al. 2000. ICBP90, a novel human CCAAT binding protein, involved in the regulation of topoisomerase II α expression. *Cancer Res.* 60: 121-128.
- Muto, M., et al. 2002. Targeted disruption of Np95 gene renders murine embryonic stem cells hypersensitive to DNA damaging agents and DNA replication blocks. *J. Biol. Chem.* 277: 34549-34555.
- Bonapace, I.M., et al. 2002. Np95 is regulated by E1A during mitotic reactivation of terminally differentiated cells and is essential for S phase entry. *J. Cell Biol.* 157: 909-914.
- Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607990. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Jenkins, Y., et al. 2005. Critical role of the ubiquitin ligase activity of UHRF1, a nuclear RING finger protein, in tumor cell growth. *Mol. Biol. Cell* 16: 5621-5629.

CHROMOSOMAL LOCATION

Genetic locus: UHRF1 (human) mapping to 19p13.3; Uhrf1 (mouse) mapping to 17 D.

SOURCE

UHRF1 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UHRF1 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-79806 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UHRF1 (E-15) is recommended for detection of UHRF1 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).

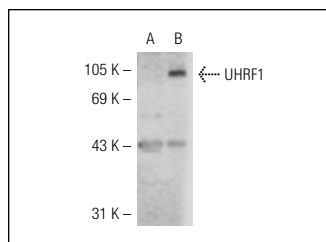
UHRF1 (E-15) is also recommended for detection of UHRF1 in additional species, including equine.

Suitable for use as control antibody for UHRF1 siRNA (h): sc-76805, UHRF1 siRNA (m): sc-155976, UHRF1 shRNA Plasmid (h): sc-76805-SH, UHRF1 shRNA Plasmid (m): sc-155976-SH, UHRF1 shRNA (h) Lentiviral Particles: sc-76805-V and UHRF1 shRNA (m) Lentiviral Particles: sc-155976-V.

Molecular Weight of UHRF1: 90 kDa.

Positive Controls: UHRF1 (m): 293T Lysate: sc-124463, MDA-MB-231 cell lysate: sc-2232 or HeLa nuclear extract: sc-2120.

DATA



UHRF1 (E-15): sc-79806. Western blot analysis of UHRF1 expression in non-transfected: sc-117752 (A) and mouse UHRF1 transfected: sc-124463 (B) 293T 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.

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 **UHRF1 (H-8): sc-373750** or **UHRF1 (G-2): sc-166898**, our highly recommended monoclonal alternatives to UHRF1 (E-15). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **UHRF1 (H-8): sc-373750**.