

ICBP90 / UHRF1 Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF2336a

Specification

ICBP90 / UHRF1 Antibody (C-Term) - Product Information

Application WB

Primary Accession <u>O96T88</u>

Other Accession <u>NP_001041666.1</u>, <u>NP_037414.3</u>, <u>29128</u>, <u>18140</u>

(mouse)

Reactivity Human

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG

Calculated MW 89814

ICBP90 / UHRF1 Antibody (C-Term) - Additional Information

Gene ID 29128

Other Names

E3 ubiquitin-protein ligase UHRF1, 6.3.2.-, Inverted CCAAT box-binding protein of 90 kDa, Nuclear protein 95, Nuclear zinc finger protein Np95, HuNp95, hNp95, RING finger protein 106, Transcription factor ICBP90, Ubiquitin-like PHD and RING finger domain-containing protein 1, hUHRF1, Ubiquitin-like-containing PHD and RING finger domains protein 1, UHRF1, ICBP90, NP95, RNF106

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ICBP90 / UHRF1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

ICBP90 / UHRF1 Antibody (C-Term) - Protein Information

Name UHRF1

Synonyms ICBP90, NP95, RNF106

Function



Multidomain protein that acts as a key epigenetic regulator by bridging DNA methylation and chromatin modification. Specifically recognizes and binds hemimethylated DNA at replication forks via its YDG domain and recruits DNMT1 methyltransferase to ensure faithful propagation of the DNA methylation patterns through DNA replication. In addition to its role in maintenance of DNA methylation, also plays a key role in chromatin modification: through its tudor-like regions and PHD-type zinc fingers, specifically recognizes and binds histone H3 trimethylated at 'Lys-9' (H3K9me3) and unmethylated at 'Arg-2' (H3R2me0), respectively, and recruits chromatin proteins. Enriched in pericentric heterochromatin where it recruits different chromatin modifiers required for this chromatin replication. Also localizes to euchromatic regions where it negatively regulates transcription possibly by impacting DNA methylation and histone modifications. Has E3 ubiquitin-protein ligase activity by mediating the ubiquitination of target proteins such as histone H3 and PML. It is still unclear how E3 ubiquitin-protein ligase activity is related to its role in chromatin in vivo. Plays a role in DNA repair by cooperating with UHRF2 to ensure recruitment of FANCD2 to interstrand cross-links (ICLs) leading to FANCD2 activation. Acts as a critical player of proper spindle architecture by catalyzing the 'Lys-63'-linked ubiquitination of KIF11, thereby controlling KIF11 localization on the spindle (PubMed:37728657).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00358, ECO:0000269|PubMed:10646863, ECO:0000269|PubMed:17673620, ECO:0000269|PubMed:17967883, ECO:0000269|PubMed:19056828, ECO:0000269|PubMed:21777816, ECO:0000269|PubMed:30335751} Note=Associated, through the YDG domain (also called SRA domain), with replicating DNA from early to late S phase, including at replicating pericentric heterochromatin (By similarity). Also localizes to euchromatic regions. In non-S-phase cells, homogenously distributed through the nucleus (By similarity). {ECO:0000250|UniProtKB:Q8VDF2}

Tissue Location

Expressed in thymus, bone marrow, testis, lung and heart. Overexpressed in breast cancer.

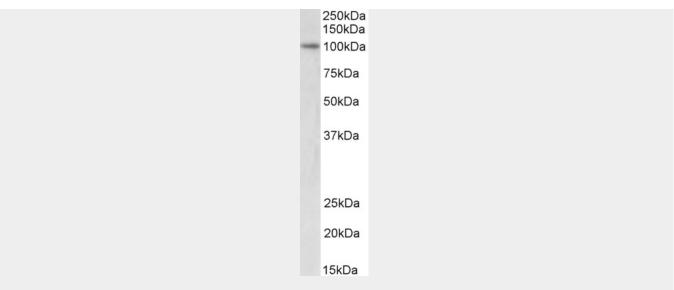
ICBP90 / UHRF1 Antibody (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ICBP90 / UHRF1 Antibody (C-Term) - Images





AF2336a (2 μ g/ml) staining of nuclear Jurkat lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

ICBP90 / UHRF1 Antibody (C-Term) - Background

This antibody is expected to recognise both reported isoforms.

ICBP90 / UHRF1 Antibody (C-Term) - References

ICBP90, a novel human CCAAT binding protein, involved in the regulation of topoisomerase Ilalpha expression. Hopfner R, Mousli M, Jeltsch JM, Voulgaris A, Lutz Y, Marin C, Bellocq JP, Oudet P, Bronner C. Cancer Res. 2000 Jan 1;60(1):121-8. PMID: 10646863