Immunotag™ UHRF1 Monoclonal Antibody

Antibody Specification	
Catalog No.	ITM1111
Product Description	Immunotag™ UHRF1 Monoclonal Antibody
Size	50 μg, 100 μg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	UHRF1
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,IF
Recommended Dilution	Western Blot: 1/1000 - 1/2000. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant human UHRF1 (N-terminus) protein fragments expressed in E.coli.
Specificity	UHRF1 Monoclonal Antibody detects endogenous levels of UHRF1 protein.
Purification	Affinity purification
Form	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Gene Name	UHRF1
Accession No.	Q96T88 Q8VDF2
Alternate Names	UHRF1; ICBP90; NP95; RNF106; E3 ubiquitin-protein ligase UHRF1; 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; Ubiquit

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Description	ubiquitin like with PHD and ring finger domains 1(UHRF1) Homo sapiens This gene encodes a member of a subfamily of RING-finger type E3 ubiquitin ligases. The protein binds to specific DNA sequences, and recruits a histone deacetylase to regulate gene expression. Its expression peaks at late G1 phase and continues during G2 and M phases of the cell cycle. It plays a major role in the G1/S transition by regulating topoisomerase llalpha and retinoblastoma gene expression, and functions in the p53-dependent DNA damage checkpoint. It is regarded as a hub protein for the integration of epigenetic information. This gene is up-regulated in various cancers, and it is therefore considered to be a therapeutic target. Multiple transcript variants encoding different isoforms have been found for this gene. A related pseudogene exists on chromosome 12. [provided by RefSeq, Feb 2014],
Protein Expression	Epithelium,PCR rescued clones,Testis,Thymus,
Subcellular Localization	nuclear chromatin,euchromatin,heterochromatin,nucleus,replication fork,nuclear heterochromatin,nuclear matrix,
Protein Function	developmental stage:Expressed in fetal thymus, liver and kidney.,domain:The RING finger is required for ubiquitin ligase activity.,domain:The YDG domain mediates the interaction with histone H3.,function:Putative E3 ubiquitin-protein ligase. May participate in methylation-dependent transcriptional regulation. Binds to inverted 5'-CCAAT-3' box 2 in the TOP2A promoter, and activates TOP2A expression. Important for G1/S transition. May be involved in DNA repair and chromosomal stability.,induction:Up-regulated in proliferating cells, and down-regulated in quiescent cells. Down-regulated upon adriamycin-induced DNA damage, in a TP53/p53 and CDKN1A-dependent way. Induced by E2F1 transcription factor.,pathway:Protein modification; protein ubiquitination.,PTM:Phosphorylated on serine residues. Phosphorylation may enhance DNA-binding activity.,PTM:Ubiquitinated; which leads to proteasomal degradation. Polyubiquitination may be stimulated by DNA damage.,similarity:Contains 1 PHD-type zinc finger.,similarity:Contains 1 ubiquitin-like domain.,similarity:Contains 1 YDG domain.,similarity:Contains 2 RING-type zinc fingers.,subunit:Interacts with histones H3, H1 and H2B (By similarity). Interacts with HDAC1, but not with HDAC2. Interacts with UHRF1BP1. Binds methylated CpG containing oligonucleotides.,tissue specificity:Expressed in thymus, bone marrow, testis, lung and heart. Overexpressed in breast cancer.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.