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(Mouse) Uhrf2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21392c

Product Information

Application	WB, E
Primary Accession	Q7TMI3
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52404
Calculated MW	90106

Additional Information

Gene ID	109113
Other Names	E3 ubiquitin-protein ligase UHRF2, 632-, NIRF, Np95-like ring finger protein, Nuclear protein 97, Nuclear zinc finger protein Np97, Ubiquitin-like PHD and RING finger domain-containing protein 2, Ubiquitin-like-containing PHD and RING finger domains protein 2, Uhrf2, Nirf
Target/Specificity	This Mouse Uhrf2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 472-505 amino acids from the Central region of Mouse Uhrf2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	(Mouse) Uhrf2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Uhrf2
Synonyms	Nirf
Function	E3 ubiquitin ligase that plays important roles in DNA methylation, histone

	modifications, cell cycle and DNA repair. Acts as a specific reader for 5-hydroxymethylcytosine (5hmC) and thereby recruits various substrates to these sites to ubiquitinate them (PubMed:23434322, PubMed:28402695). This activity also allows the maintenance of 5mC levels at specific genomic loci and regulates neuron-related gene expression (PubMed:28115522). Participates in cell cycle regulation by ubiquitinating cyclins CCND1 and CCNE1 and thus inducing G1 arrest. Also ubiquitinates PCNP leading to its degradation by the proteasome. Plays an active role in DNA damage repair by ubiquitinating p21/CDKN1A leading to its proteasomal degradation. Also promotes DNA repair by acting as an interstrand cross-links (ICLs) sensor. Mechanistically, cooperates with UHRF1 to ensure recruitment of FANCD2 to ICLs, leading to FANCD2 monoubiquitination and subsequent activation. Contributes to UV-induced DNA damage response by physically interacting with ATR in response to irradiation, thereby promoting ATR activation (By similarity).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00358, ECO:0000269|PubMed:21598301}. Chromosome {ECO:0000250|UniProtKB:Q96PU4}. Note=Enriched at genomic loci that are enriched for 5-hydroxy-methylcytosine (5hmC) {ECO:0000250|UniProtKB:Q96PU4}
Tissue Location	Mostly detected in several tissues, including the thymus, spleen, lung, adrenal gland, and ovary. In addition, found in several tissues in the brain (cerebellum, hippocampus, and cerebral cortex).

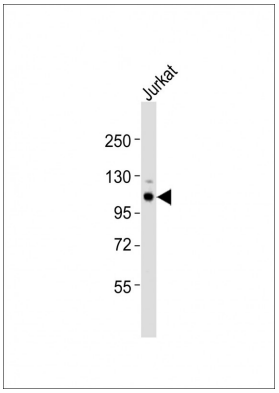
Background

E3 SUMO-, but not ubiquitin-, protein ligase for ZNF131 (By similarity). E3 ubiquitin-protein ligase that is an intermolecular hub protein in the cell cycle network. Ubiquitinates cyclins, CCND1 and CCNE1, in an apparently phosphorylation-independent manner and induces G1 arrest. Also ubiquitinates PCNP leading to its degradation by the proteasome. Through cooperative DNA and histone binding, may contribute to a tighter epigenetic control of gene expression in differentiated cells.

References

Davenport J.W.,et al.Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
Mori T.,et al.Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
Carninci P.,et al.Science 309:1559-1563(2005).
Pichler G.,et al.J. Cell. Biochem. 112:2585-2593(2011).

Images



Anti-Uhrf2 Antibody (Center)at 1:1000 dilution + Jurkat whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 90 kDa Blocking/Dilution buffer: 5% NFDM/TBST.