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(Mouse) Uhrf1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21204b

Specification

(Mouse) Uhrf1 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q8VDF2
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**88304**
Antigen Region	**596-628**

(Mouse) Uhrf1 Antibody (C-term) - Additional Information

Gene ID 18140

Other Names
E3 ubiquitin-protein ligase UHRF1, 632-, Nuclear protein 95, Nuclear zinc finger protein Np95, Ubiquitin-like PHD and RING finger domain-containing protein 1, mUhrf1, Ubiquitin-like-containing PHD and RING finger domains protein 1, Uhrf1, Np95

Target/Specificity
This Mouse Uhrf1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 596-628 amino acids from the C-terminal region of Mouse Uhrf1.

Dilution
WB~~1:2000
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) Uhrf1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

(Mouse) Uhrf1 Antibody (C-term) - Protein Information

Name Uhrf1

Synonyms Np95

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. Plays a pivotal role in the establishment of correct spindle architecture by catalyzing the 'Lys-63'-linked ubiquitination of KIF11, thereby controlling KIF11 localization on the spindle.

Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00358, ECO:0000269|PubMed:10984098, ECO:0000269|PubMed:11161719, ECO:0000269|PubMed:14993289, ECO:0000269|PubMed:17994007, ECO:0000269|PubMed:21489993, ECO:0000269|PubMed:36056023, ECO:0000269|PubMed:8634372}. Note=Associated, through the YDG domain (also called SRA domain), with replicating DNA from early to late S phase, including at replicating pericentric heterochromatin (PubMed:36056023). Also localizes to euchromatic regions. In non-S- phase cells, homogenously distributed through the nucleus (PubMed:36056023).

Tissue Location
Expressed in thymus, testis, spleen and lung. Within testis, expressed in almost all cells except elongated spermatids.

(Mouse) 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
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

(Mouse) Uhrf1 Antibody (C-term) - Images

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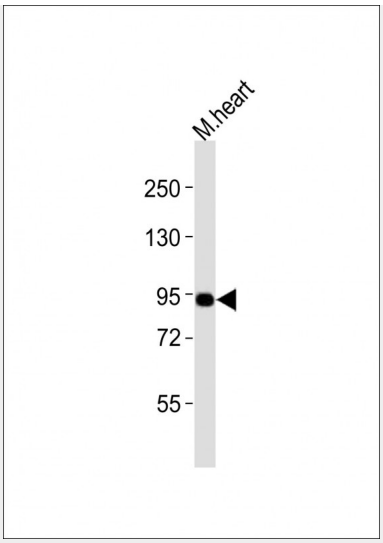
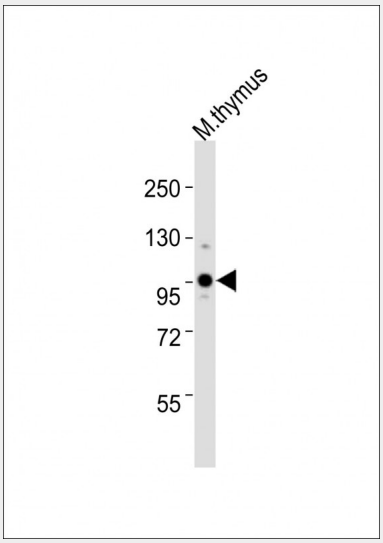


Anti-Uhrf1 Antibody (C-term) at 1:1000 dilution + mouse heart lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 88 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-Uhrf1 Antibody (C-term) at 1:2000 dilution + mouse thymus lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 88 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

(Mouse) Uhrf1 Antibody (C-term) - Background

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. May be involved in DNA repair.

(Mouse) Uhrf1 Antibody (C-term) - References

Fujimori A.,et al.Mamm. Genome 9:1032-1035(1998).
Davenport J.W.,et al.Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
Carninci P.,et al.Science 309:1559-1563(2005).
Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009).
Muto M.,et al.J. Biol. Chem. 277:34549-34555(2002).