10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

(Mouse) Uhrf2 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21392c

Specification

(Mouse) Uhrf2 Blocking Peptide (Center) - Product Information

Primary Accession Q7TMI3

(Mouse) Uhrf2 Blocking Peptide (Center) - 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
The synthetic peptide sequence is selected from aa 472-485 of HUMAN Uhrf2

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

(Mouse) Uhrf2 Blocking Peptide (Center) - 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. Ubiquitinates also 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. Promotes also 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).

(Mouse) Uhrf2 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

(Mouse) Uhrf2 Blocking Peptide (Center) - Images

(Mouse) Uhrf2 Blocking Peptide (Center) - 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.

(Mouse) Uhrf2 Blocking Peptide (Center) - 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).