

UHRF2 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI10728

Product Information

Application WB, IHC Primary Accession Q96PU4

Other Accession <u>NM 152896</u>, <u>NP 690856</u>

Reactivity Human, Mouse, Rat, Rabbit, Dog, Horse, Bovine

Predicted Human, Mouse, Dog, Horse, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 89985

Additional Information

Gene ID 115426

Alias Symbol NIRF, URF2, RNF107, RP11-472F14.2

Other Names E3 ubiquitin-protein ligase UHRF2, 6.3.2.-, Np95/ICBP90-like RING finger

protein, Np95-like RING finger protein, Nuclear protein 97, Nuclear zinc finger protein Np97, RING finger protein 107, Ubiquitin-like PHD and RING finger domain-containing protein 2, Ubiquitin-like-containing PHD and RING finger

domains protein 2, UHRF2, NIRF, RNF107

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-UHRF2 antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

Precautions UHRF2 antibody - N-terminal region is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name UHRF2

Synonyms NIRF, RNF107

Function E3 ubiquitin ligase that plays important roles in DNA methylation, histone

modifications, cell cycle and DNA repair (PubMed: 15178429,

PubMed:<u>23404503</u>, PubMed:<u>27743347</u>, PubMed:<u>29506131</u>). Acts as a specific reader for 5-hydroxymethylcytosine (5hmC) and thereby recruits various substrates to these sites to ubiquitinate them (PubMed:<u>24813944</u>,

PubMed:27129234). This activity also allows the maintenance of 5mC levels at specific genomic loci and regulates neuron-related gene expression (By similarity). Participates in cell cycle regulation by ubiquitinating cyclins CCND1 and CCNE1 and thereby inducing G1 arrest (PubMed:15178429, PubMed:15361834, PubMed:21952639). Also ubiquitinates PCNP leading to its degradation by the proteasome (PubMed:12176013, PubMed:14741369). Plays an active role in DNA damage repair by ubiquitinating p21/CDKN1A leading to its proteasomal degradation (PubMed:29923055). 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 (PubMed:30335751). Contributes to UV-induced DNA damage response by physically interacting with ATR in response to irradiation, thereby promoting ATR activation (PubMed:33848395).

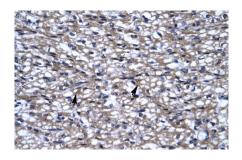
Cellular Location

Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00358, ECO:0000269 | PubMed:12176013, ECO:0000269 | PubMed:23404503, ECO:0000269 | PubMed:27129234, ECO:0000269 | PubMed:27743347, ECO:0000269 | PubMed:29923055, ECO:0000269 | PubMed:30335751}. Chromosome. Note=Enriched at genomic loci that are enriched for 5-hydroxymethylcytosine (5hmC)

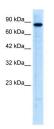
References

Li,Y., et al., (2004) Biochem. Biophys. Res. Commun. 319 (2), 464-468Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

Images



Human Heart



WB Suggested Anti-UHRF2 Antibody Titration: 0.2-1 µg/ml ELISA Titer: 1:62500

Positive Control: Jurkat cell lysate

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.