

KD-Validated Anti-UHRF2 Mouse Monoclonal Antibody

Mouse monoclonal antibody Catalog # AGI2184

Specification

KD-Validated Anti-UHRF2 Mouse Monoclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Clonality
Isotype
Calculated MW
Gene Name
Aliases

WB 096PU4

Rat, Human, Mouse

Monoclonal Mouse IgG1

Predicted, 90kDa, observed, 95 kDa KDa

UHRF2

UHRF2; Ubiquitin Like With PHD And Ring Finger Domains 2; RNF107; NIRF; TDRD23; URF2; Ubiquitin-Like With PHD And Ring Finger Domains 2, E3 Ubiquitin Protein Ligase; Ubiquitin-Like-Containing PHD And

RING Finger Domains Protein 2; Ubiquitin-Like PHD And RING Finger Domain-Containing Protein 2; RING-Type

E3 Ubiquitin Transferase UHRF2;

Np95/ICBP90-Like RING Finger Protein; E3 Ubiquitin-Protein Ligase UHRF2; Np95-Like Ring Finger Protein; RING Finger Protein 107; Nuclear Protein 97; MGC33463; Ubiquitin-Like, Containing PHD And RING Finger Domains, 2; Nuclear Zinc Finger Protein NP97; Nuclear Zinc Finger Protein Np97; Np95-Like RING Finger Protein; EC

2.3.2.27; EC 6.3.2

Recombinant protein of human UHRF2

KD-Validated Anti-UHRF2 Mouse Monoclonal Antibody - Additional Information

Gene ID 115426

Other Names

Immunogen

E3 ubiquitin-protein ligase UHRF2, 2.3.2.27, Np95/ICBP90-like RING finger protein, Np95-like RING finger protein, Nuclear protein 97, Nuclear zinc finger protein Np97, RING finger protein 107, RING-type E3 ubiquitin transferase UHRF2, Ubiquitin-like PHD and RING finger domain-containing protein 2, Ubiquitin-like-containing PHD and RING finger domains protein 2, UHRF2, NIRF, RNF107

KD-Validated Anti-UHRF2 Mouse Monoclonal Antibody - 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:23404503, PubMed:27743347, PubMed:29506131). Acts as a specific reader for 5-hydroxymethylcytosine (5hmC) and thereby recruits various substrates to these sites to ubiquitinate them (PubMed: 24813944, 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: <a $href="http://www.uniprot.org/citations/30335751"\ target="_blank">30335751).\ Contributes$ 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)

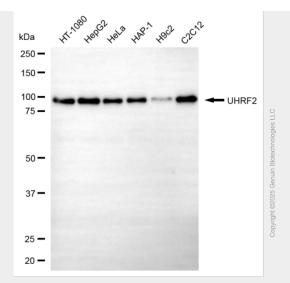
KD-Validated Anti-UHRF2 Mouse Monoclonal Antibody - Protocols

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

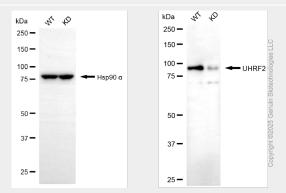
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KD-Validated Anti-UHRF2 Mouse Monoclonal Antibody - Images





Western blotting analysis using anti-UHRF2 antibody (Cat#65103). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-UHRF2 antibody (Cat#65103, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQ $^{\text{TM}}$ ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-UHRF2 antibody (Cat#65103). UHRF2 expression in wild-type (WT) and UHRF2 knockdown (KD) HSHC cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-UHRF2 antibody (Cat#65103, 1:2,000) and HRP-conjugated goat anti-mouse secondary antibody (Cat#101, 1:20,000) respectively. Image was developed using FeQTM ECL Substrate Kit (Cat#226).