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Anti-NIRF Picoband Antibody

Catalog # ABO12592

Product Information

Application	WB, IHC-P
Primary Accession	Q96PU4
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for E3 ubiquitin-protein ligase UHRF2(UHRF2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	115426
Other Names	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
Calculated MW	89985
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Nucleus . Enriched at pericentric heterochromatin (PH). This localization is dependent on the interaction with H3K9me3 (By similarity). .
Source	Eukaryota
Protein Name	E3 ubiquitin-protein ligase UHRF2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human NIRF (15-54aa TIEDVSRKATIEELRERVWALFDVRPECQRLFYRGKQLEN), identical to the related mouse and rat sequences.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

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: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)

Background

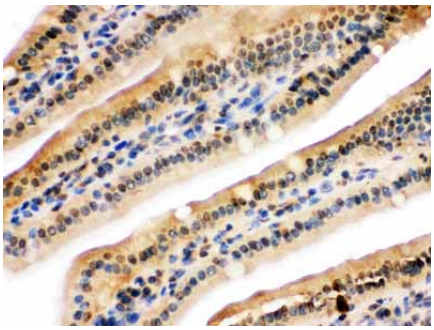
E3 ubiquitin-protein ligase UHRF2 is an enzyme that in humans is encoded by the UHRF2 gene. This gene encodes a nuclear protein which is involved in cell-cycle regulation. The encoded protein is a ubiquitin-ligase capable of ubiquinating PCNP (PEST-containing nuclear protein), and together they may play a role in tumorigenesis. The encoded protein contains an NIRF_N domain, a PHD finger, a set- and ring-associated (SRA) domain, and a RING finger domain and several of these domains have been shown to be essential for the regulation of cell proliferation. This protein may also have a role in intranuclear degradation of polyglutamine aggregates. Alternative splicing results in multiple transcript variants some of which are non-protein coding.

Images

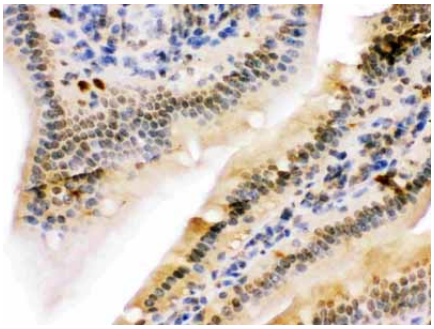
Western blot analysis of NIRF expression in rat testis extract (lane 1) and K562 whole cell lysates (lane 2). NIRF at 90KD was detected using rabbit anti- NIRF Antigen Affinity purified polyclonal antibody (Catalog #



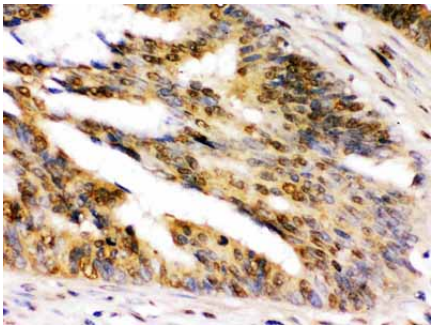
ABO12592) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .



NIRF was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti- NIRF Antigen Affinity purified polyclonal antibody (Catalog # ABO12592) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .



NIRF was detected in paraffin-embedded sections of rat intestine tissues using rabbit anti- NIRF Antigen Affinity purified polyclonal antibody (Catalog # ABO12592) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .



NIRF was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- NIRF Antigen Affinity purified polyclonal antibody (Catalog # ABO12592) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .

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