10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-NIRF Picoband Antibody

Catalog # ABO12592

Specification

Anti-NIRF Picoband Antibody - 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.

Anti-NIRF Picoband Antibody - 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 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization
Nucleus . Enriched at pericentric heterochromatin (PH). This localization is dependent on the interaction with H3K9me3 (By similarity). .

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.**

Anti-NIRF Picoband 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: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)

Anti-NIRF Picoband Antibody - Protocols

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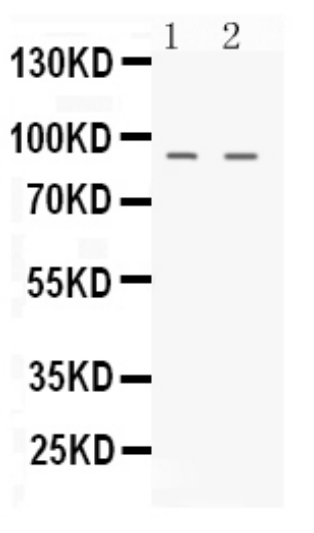
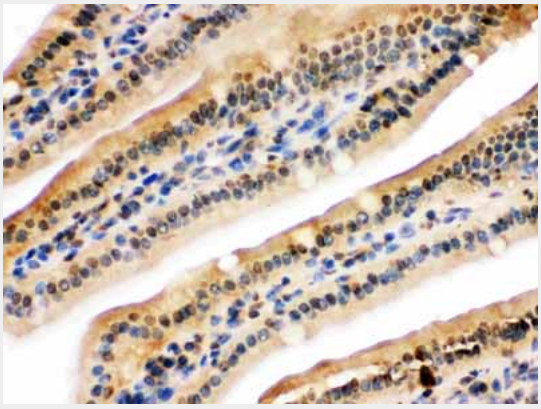
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NIRF Picoband Antibody - 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 Î¼g/mL. The immunohistochemical section was developed using SABC method .

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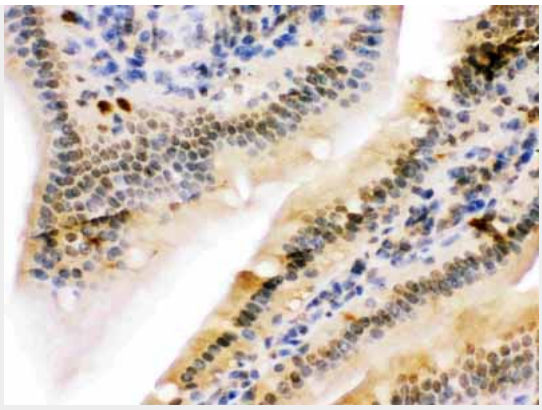
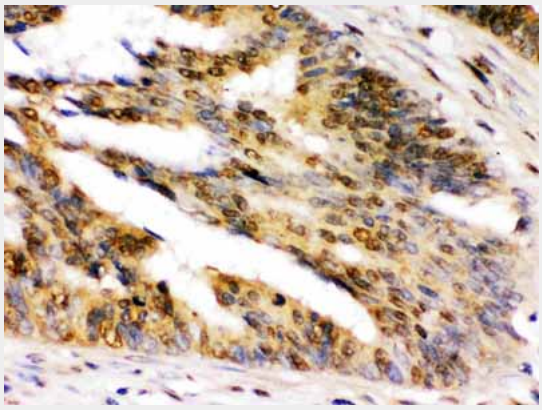


NIRF was detected in paraffin-embedded sections of rat intestine tissues using rabbit anti- NIRF Antigen Affinity purified polyclonal antibody (Catalog # ABO12592) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



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 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-NIRF Picoband Antibody - 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.