

**Rabbit Anti-NIRF/UHRF2 Polyclonal: RC0002**

**Intended Use:** For Research Use Only

**Description:** NIRF (Np95/ICBP90-like RING finger protein), also known as E3 ubiquitin-protein ligase UHRF2, Nuclear zinc finger protein Np97 or RING finger protein 107, is a nuclear protein involved in cell cycle regulation. NIRF contains a PHD finger, two RING fingers, a ubiquitin-like domain and a YDG/SRA domain. It shares high structural homology with UHRF1 (also called ICBP90 in humans and Np95 in mice), however, in contrast to UHRF1, NIRF acts as a negative regulator of cell proliferation. It associates with the Cdk2-cyclin complex in its dephosphorylated form and induces G1 arrest. NIRF plays an important role in the regulation of the G1/S transition by blocking cell entry into the S-phase. While associated with Cdk2, NIRF becomes phosphorylated. NIRF can also act as a ubiquitin ligase and it ubiquitinates PCNP. In addition, NIRF can recruit and bind HDAC1 via its SRA domain. The overexpression of NIRF results in an increase of G1 phase cells.

**Specifications**

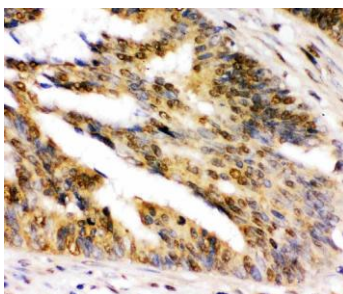
Clone: Polyclonal  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse, rat  
 Immunogen: Synthetic peptide corresponding to a sequence at the N-terminus of human NIRF aa 15-54  
 Localization: Nucleus  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, WB  
 Package:

Description	Catalog No.	Size
NIRF/UHRF2 Polyclonal Concentrated	RC0002	1 ml

**IHC Procedure\***

Positive Control Tissue: Intestine, intestinal cancer  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: Overnight @ 4°C  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human intestine cancer stained with anti-NIRF using DAB

**References:**

1. Loss of UHRF2 expression is associated with human neoplasia, promoter hypermethylation, decreased 5-hydroxymethylcytosine, and high proliferative activity. Huarui Lu, et al. *Oncotarget*. 2016 Nov 15; 7(46), 2016.
2. Overexpression of UHRF2 in intrahepatic cholangiocarcinoma and its clinical significance. Rui Peng, et al. *Onco Targets Ther*. 10: 5863–5872, 2017.
3. Ubiquitin-like with PHD and ring finger domains 2 is a predictor of survival and a potential therapeutic target in colon cancer. Su Lu, et al. *Oncol Rep*. Apr;31(4):1802-10, 2014.

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