

## **UHRF1** Antibody

Rabbit Polyclonal Antibody Catalog # ABV11137

### **Specification**

#### **UHRF1** Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB
Q96T88
Human
Rabbit
Polyclonal
Rabbit IgG
89814

## **UHRF1** Antibody - Additional Information

#### **Gene ID 29128**

Positive Control Western Blot:

Various cell

lysates

Application & Usage Western blot:

1:500 - 1:2000, IHC: 1:50 - 1:200, IF: 1:20 - 1:50, IP: 1:20 - 1:50, CHIP:

1:20 - 1:50. However, the

optimal

conditions should be determined individually.

### **Other Names**

FLJ21925, ICBP90, MGC138707, Np95, RNF106, hNP95

Target/Enecificity

Target/Specificity UHRF1

**Antibody Form** 

Liquid

Appearance

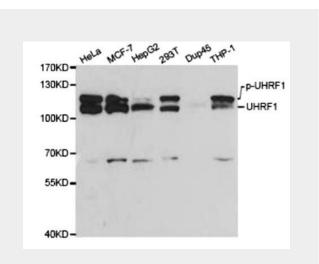
Colorless liquid

### **Formulation**

100  $\mu g$  of antibody in 100  $\mu l$  PBS containing 0.02% sodium azide, 50% glycerol, pH 7.3

### **Handling**

The antibody solution should be gently



WB of various cell extracts with UHRF1 pAb.

# **UHRF1 Antibody - Background**

UHRF1, also named as ICBP90, NP95 and RNF106, is a putative E3 ubiquitin protein ligase. It may participate in methylation dependent transcriptional regulation. UHRF1 binds to inverted 5'CCAAT3' box 2 in the TOP2A promoter, and activates TOP2A expression. It is important for G1/S transition and may be involved in DNA repair and chromosomal stability. UHRF1's ability to repress its direct target gene expression is dependent on PHD (UHRF1) binding to unmodified H3R2.



mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

#### **Precautions**

UHRF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**UHRF1 Antibody - Protein Information** 

Name UHRF1

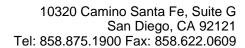
Synonyms ICBP90, NP95, RNF106

#### **Function**

Multidomain protein that acts as a key epigenetic regulator by bridging DNA methylation and chromatin modification. Specifically recognizes and binds hemimethylated DNA at replication forks via its YDG domain and recruits DNMT1 methyltransferase to ensure faithful propagation of the DNA methylation patterns through DNA replication. In addition to its role in maintenance of DNA methylation, also plays a key role in chromatin modification: through its tudor-like regions and PHD-type zinc fingers, specifically recognizes and binds histone H3 trimethylated at 'Lys-9' (H3K9me3) and unmethylated at 'Arg-2' (H3R2me0), respectively, and recruits chromatin proteins. Enriched in pericentric heterochromatin where it recruits different chromatin modifiers required for this chromatin replication. Also localizes to euchromatic regions where it negatively regulates transcription possibly by impacting DNA methylation and histone modifications. Has E3 ubiquitin-protein ligase activity by mediating the ubiquitination of target proteins such as histone H3 and PML. It is still unclear how E3 ubiquitin-protein ligase activity is related to its role in chromatin in vivo. May be involved in DNA repair.

### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00358, ECO:0000269|PubMed:10646863,





ECO:0000269|PubMed:17673620, ECO:0000269|PubMed:17967883, ECO:0000269|PubMed:19056828, ECO:0000269|PubMed:21777816}.

Note=Localizes to replication foci Enriched in pericentric heterochromatin. Also localizes to euchromatic regions

## **Tissue Location**

Expressed in thymus, bone marrow, testis, lung and heart. Overexpressed in breast cancer.

# **UHRF1 Antibody - Protocols**

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

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