

## ARG45413 anti-UHRF1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes UHRF1
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	UHRF1
Species	Human
Immunogen	Synthetic peptide corresponding to N-terminal region of human UHRF1.
Conjugation	Un-conjugated
Alternate Names	UHRF1; Nuclear zinc finger protein Np95; HuNp95; EC 6.3.2.-; hUHRF1; RING finger protein 106; hNp95; Ubiquitin-like PHD and RING finger domain-containing protein 1; Nuclear protein 95; ICBP90; Transcription factor ICBP90; RNF106; Np95; Inverted CCAAT box-binding protein of 90 kDa; Ubiquitin-like-containing PHD and RING finger domains protein 1; huNp95; E3 ubiquitin-protein ligase UHRF1; hNP95

### Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 µg/10 <sup>6</sup> cells
	ICC/IF	2 µg/ml
	IHC-P	0.5-1 µg/ml
	WB	0.1-0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	100 kDa	

### Properties

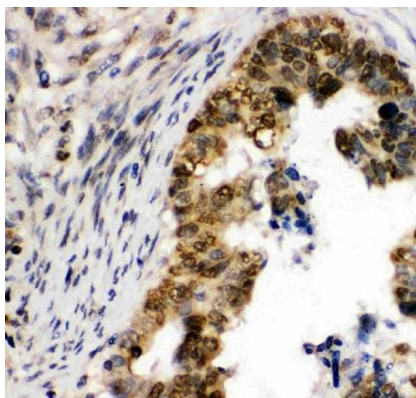
Form	Liquid
Purification	Affinity purified
Buffer	0.9% NaCl, 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA

Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

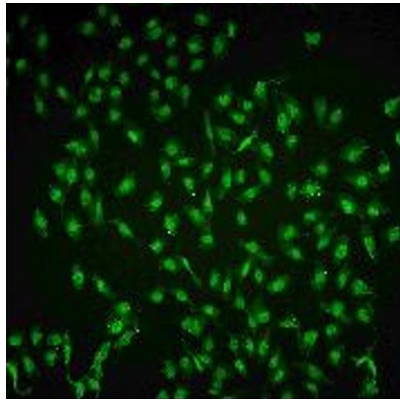
Gene Symbol	UHRF1
Gene Full Name	ubiquitin-like with PHD and ring finger domains 1
Background	Putative E3 ubiquitin-protein ligase. May participate in methylation-dependent transcriptional regulation. Binds to inverted 5'-CCAAT-3' box 2 in the TOP2A promoter, and activates TOP2A expression. Important for G1/S transition. May be involved in DNA repair and chromosomal stability.
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. [UniProt]
Calculated Mw	90 kDa
PTM	Phosphorylation at Ser-298 of the linker region decreases the binding to H3K9me3. Phosphorylation at Ser-639 by CDK1 during M phase impairs interaction with USP7, preventing deubiquitination and leading to degradation by the proteasome. Ubiquitinated; which leads to proteasomal degradation. Autoubiquitinated; interaction with USP7 leads to deubiquitination and prevents degradation. Ubiquitination and degradation takes place during M phase, when phosphorylation at Ser-639 prevents interaction with USP7 and subsequent deubiquitination. Polyubiquitination may be stimulated by DNA damage.. [UniProt]
Cellular Localization	Nucleus. [UniProt]

## Images



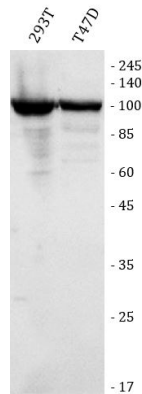
ARG45413 anti-UHRF1 antibody IHC-P image

Immunohistochemistry: Human intestinal cancer stained with ARG45413 anti-UHRF1 antibody at 1 µg/ml dilution.



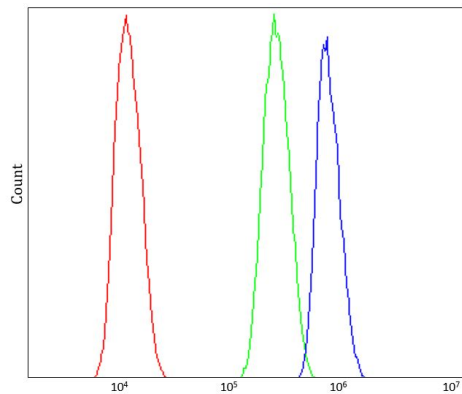
ARG45413 anti-UHRF1 antibody ICC/IF image

Immunofluorescence: U2OS stained with ARG45413 anti-UHRF1 antibody at 2  $\mu\text{g}/\text{ml}$  dilution.



ARG45413 anti-UHRF1 antibody WB image

Western blot: 293T and T47D stained with ARG45413 anti-UHRF1 antibody at 0.5  $\mu\text{g}/\text{ml}$  dilution.



ARG45413 anti-UHRF1 antibody FACS image

Flow Cytometry: U2OS stained with ARG45413 anti-UHRF1 antibody at 1  $\mu\text{g}/10^6$  cells dilution.