

## ATR (Phospho-Ser428) Antibody

Catalog No: #12129

Package Size: #12129-1 50ul #12129-2 100ul

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## Description

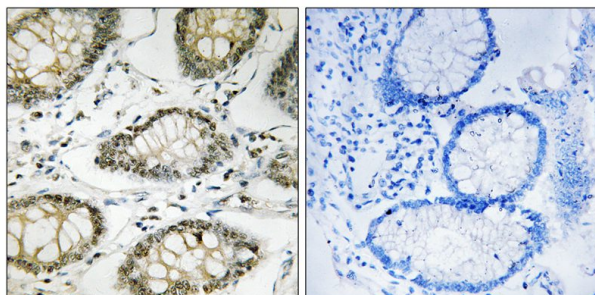
Product Name	ATR (Phospho-Ser428) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	IHC IF
Species Reactivity	Human Mouse Rat
Specificity	The antibody detects endogenous levels of ATR only when phosphorylated at serine 428.
Immunogen Description	The antiserum was produced against synthesized peptide derived from human ATR around the phosphorylation site of Ser428.
Target Name	ATR
Modification	Phospho
Other Names	ataxia telangiectasia and Rad3-related protein; EC 2.7.11.1; FRAP-related protein; FRP1; kinase ATR; protein kinase ATR
Accession No.	Swiss-Prot#:Q13535;NCBI Gene#:545
Uniprot	Q13535
GeneID	545;
Concentration	1.0mg/ml
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C

## Application Details

IHC 1:100-1:300

IF 1:50-200

## Images



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma tissue using ATR (Phospho-Ser428) antibody #12129. The picture on the right is treated with the synthesized peptide.

## Background

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Serine/threonine protein kinase which activates checkpoint signaling upon genotoxic stresses such as ionizing radiation (IR), ultraviolet light (UV), or DNA replication stalling, thereby acting as a DNA damage sensor. Recognizes the substrate consensus sequence [ST]-Q. Phosphorylates BRCA1, CHEK1, MCM2, RAD17, RPA2, SMC1 and p53/TP53, which collectively inhibit DNA replication and mitosis and promote DNA repair, recombination and apoptosis. Phosphorylates 'Ser-139' of histone variant H2AX/H2AFX at sites of DNA damage, thereby regulating DNA damage response mechanism. Required for FANCD2 ubiquitination. Critical for maintenance of fragile site stability and efficient regulation of centrosome duplication.

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Note: This product is for in vitro research use only