

ATR (Phospho-Ser428) Antibody

Catalog No: #12129

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

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

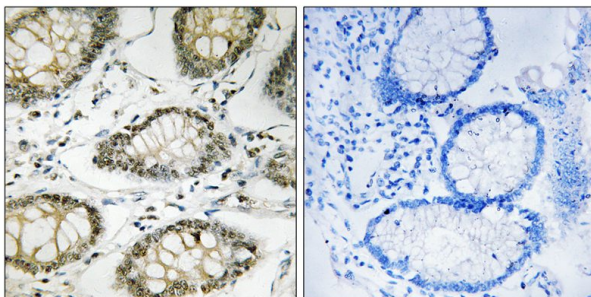
Description

Product Name	ATR (Phospho-Ser428) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of ATR only when phosphorylated at serine 428.
Immunogen Type	peptide
Immunogen Description	Peptide sequence around phosphorylation site of serine 428 (G-I-S(p)-P-K) derived from Human ATR.
Target Name	ATR
Modification	Phospho-Ser428
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
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Immunohistochemistry: 1:50~1:100

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

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.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.