

Phospho-ATR (Ser428) Antibody



PACO24216

Product Information

Size:

100ul

Reactivity:

Human

Source:

Rabbit

Isotype:

IgG

Applications:

ELISA, IHC

Recommended dilutions:

ELISA:1:2000-1:10000, IHC:1:50-1:100

Protein 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.

Gene ID:

ATR

Uniprot

Q13535

Synonyms:

ataxia telangiectasia and Rad3-related protein; EC 2.7.11.1; FRAP-related protein; FRP1; kinase ATR; protein kinase ATR

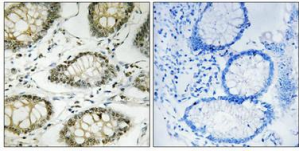
Immunogen:

Peptide sequence around phosphorylation site of serine 428 (G-I-S(p)-P-K) derived from Human ATR.

Storage:

Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Product Images



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