



ATR (phospho Ser428) rabbit pAb

Cat No.:ES6657

For research use only

Overview

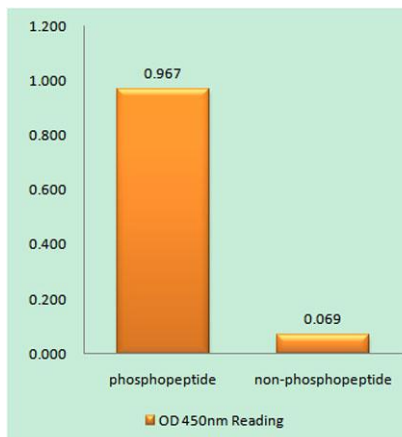
Product Name	ATR (phospho Ser428) rabbit pAb
Host species	Rabbit
Applications	IHC;IF;ELISA
Species Cross-Reactivity	Human;Rat;Mouse;
Recommended dilutions	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human ATR around the phosphorylation site of Ser428. AA range:394-443
Specificity	Phospho-ATR (S428) Polyclonal Antibody detects endogenous levels of ATR protein only when phosphorylated at S428.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Serine/threonine-protein kinase ATR
Gene Name	ATR
Cellular localization	Nucleus . Chromosome . Depending on the cell type, it can also be found in PML nuclear bodies. Recruited to chromatin during S-phase. Redistributes to discrete nuclear foci upon DNA damage, hypoxia or replication fork stalling.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	
Human Gene ID	545
Human Swiss-Prot Number	Q13535
Alternative Names	ATR; FRP1; Serine/threonine-protein kinase ATR; Ataxia telangiectasia and Rad3-related protein; FRAP-related protein 1



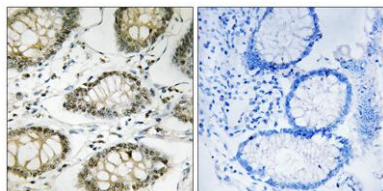


Background

The protein encoded by this gene belongs the PI3/PI4-kinase family, and is most closely related to ATM, a protein kinase encoded by the gene mutated in ataxia telangiectasia. This protein and ATM share similarity with *Schizosaccharomyces pombe rad3*, a cell cycle checkpoint gene required for cell cycle arrest and DNA damage repair in response to DNA damage. This kinase has been shown to phosphorylate checkpoint kinase CHK1, checkpoint proteins RAD17, and RAD9, as well as tumor suppressor protein BRCA1. Mutations of this gene are associated with Seckel syndrome. An alternatively spliced transcript variant of this gene has been reported, however, its full length nature is not known. Transcript variants utilizing alternative polyA sites exist. [provided by RefSeq, Jul 2008],



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using ATR (Phospho-Ser428) Antibody



Immunohistochemistry analysis of paraffin-embedded human colon carcinoma, using ATR (Phospho-Ser428) Antibody. The picture on the right is blocked with the phospho peptide.

