

**ATR (phospho Ser428) rabbit pAb****Cat#: orb769532 (Manual)**

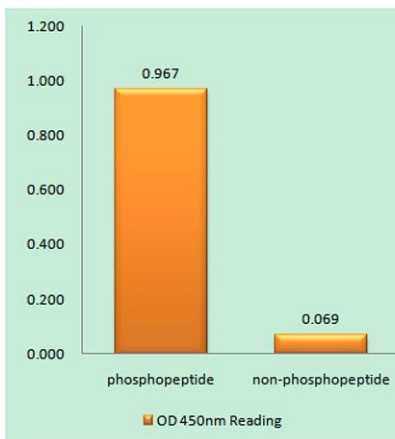
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<b>Product Name</b>	ATR (phospho Ser428) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Rat;Mouse;
<b>Recommended dilutions</b>	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human ATR around the phosphorylation site of Ser428. AA range:394-443
<b>Specificity</b>	Phospho-ATR (S428) Polyclonal Antibody detects endogenous levels of ATR protein only when phosphorylated at S428.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Serine/threonine-protein kinase ATR
<b>Gene Name</b>	ATR
<b>Cellular localization</b>	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.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

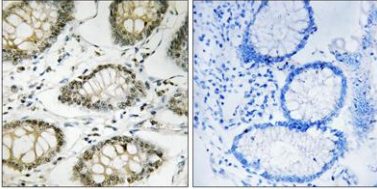
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	
<b>Human Gene ID</b>	545
<b>Human Swiss-Prot Number</b>	Q13535
<b>Alternative Names</b>	ATR; FRP1; Serine/threonine-protein kinase ATR; Ataxia telangiectasia and Rad3-related protein; FRAP-related protein 1

**Background**

The protein encoded by this gene belongs to 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.**