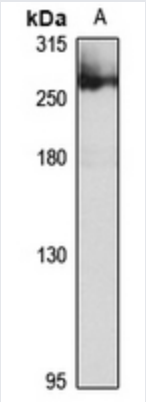
ATR Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	ATR, Polyclonal Antibody
Full Product Name	Anti-ATR Antibody
Product Gene Name	anti-ATR antibody
Product Synonym Names	FRP1; Serine/threonine-protein kinase ATR; Ataxia telangiectasia and Rad3-related protein; FRAP-related protein 1
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid in 0.42% Potassium Phosphate, 0.87% Sodium Chloride, pH 7.3, 30% Glycerol, and 0.01% Sodium Azide.
Purity/Purification	Purified by Immunogen Affinity Chromatography
Specificity	Recognizes endogenous levels of ATR protein.
Preparation and Storage	Upon delivery aliquot and store at -20 degree C for one year. Avoid freeze/thaw cycles.
Molecular Weight	301,367 Da
Chromosome Location	Chromosome: 3; NC_000003.11 (142168077..142297668, complement). Location: 3q23
OMIM	210600
3D Structure	ModBase 3D Structure for Q13535
Immunogen	KLH-conjugated synthetic peptide of human ATR. The exact sequence is proprietary.
Applications Tested/Suitable for anti-ATR antibody	Western Blot (WB)
Application Notes for anti-ATR antibody	WB: 1:500-1:2000
Related Product Information for anti-ATR antibody	MBS8306094 is an antibody targeting ATR. Reactive in Human. Host: Rabbit. Rabbit polyclonal antibody to ATR
Other Notes	Small volumes of anti-ATR antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Western Blot (WB) of anti-ATR antibody
Western blot analysis of ATR expression in NCIH460 (A) whole cell lysates.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ATR. It may not necessarily be applicable to this product.

NCBI GI #	157266317
NCBI GeneID	545
NCBI Accession #	NP_001175.2
UniProt Primary Accession #	Q13535
UniProt Secondary Accession #	Q59HB2; Q7KYL3; Q93051; Q9BXK4
UniProt Related Accession #	Q13535
GenBank Nucleotide #	NM_001184.3
NCBI Official Full Name	serine/threonine-protein kinase ATR
NCBI Official Synonym Full Names	ataxia telangiectasia and Rad3 related
NCBI Official Symbol	ATR
NCBI Official Synonym Symbols	FRP1; MEC1; SCKL; FCTCS; SCKL1
UniProt Protein Name	Serine/threonine-protein kinase ATR
UniProt Synonym Protein Names	Ataxia telangiectasia and Rad3-related protein; FRAP-related protein 1
Protein Family	ATR-interacting protein
UniProt Gene Name	ATR
UniProt Synonym Gene Names	FRP1
UniProt Entry Name	ATR_HUMAN
NCBI Protein Information	serine/threonine-protein kinase ATR; Rad3 related protein; FRAP-related protein 1; FRAP-related protein-1; MEC1, mitosis entry checkpoint 1, homolog; ataxia telangiectasia and Rad3-related protein
NCBI Summary for ATR	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]

UniProt Comments for ATR	ATR: a ser/thr kinase of the PIKK family most closely related to ATM. 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, Chk1, MCM2, RAD17, RPA2, SMC1 and p53, 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. Protein type: Kinase, lipid; EC 2.7.11.1; Protein kinase, Ser/Thr (non-receptor); Membrane protein, integral; Protein kinase, atypical; Kinase, protein; ATYPICAL group; PIKK family; ATR subfamily Chromosomal Location of Human Ortholog: 3q23 Cellular Component: XY body; nucleoplasm; Golgi apparatus; PML body; chromosome Molecular Function: protein dimerization activity; protein serine/threonine kinase activity; protein binding; DNA binding; MutLalpha complex binding; MutSalpha complex binding; ATP binding; protein kinase activity Biological Process: response to drug; peptidyl-serine phosphorylation; negative regulation of DNA replication; multicellular organismal development; protein amino acid autophosphorylation; regulation of protein binding; DNA damage checkpoint; positive regulation of DNA damage response, signal transduction by p53 class mediator; DNA replication; cell cycle; DNA repair; response to DNA damage stimulus; double-strand break repair via homologous recombination Disease: Seckel Syndrome 1; Cutaneous Telangiectasia And Cancer Syndrome, Familial
Research Articles on ATR	**1.** hXRCC3 S225 phosphorylation is mediated by ATR via an ATM-dependent signaling pathway.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/atr/8306094