

ARG43224 anti-ATR phospho (Ser428) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ATR phospho (Ser428)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ATR
Species	Human
Immunogen	Phosphospecific peptide around Ser428 of Human ATR (NP_001175.2).
Conjugation	Un-conjugated
Alternate Names	FRP1; SCKL; FCTCS; FRAP-related protein 1; Serine/threonine-protein kinase ATR; EC 2.7.11.1; MEC1; SCKL1; Ataxia telangiectasia and Rad3-related protein

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	NIH/3T3 + Nocodazole	

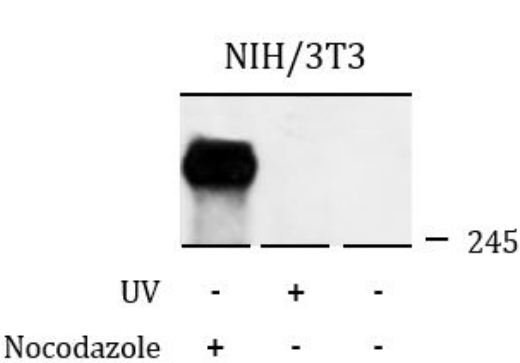
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

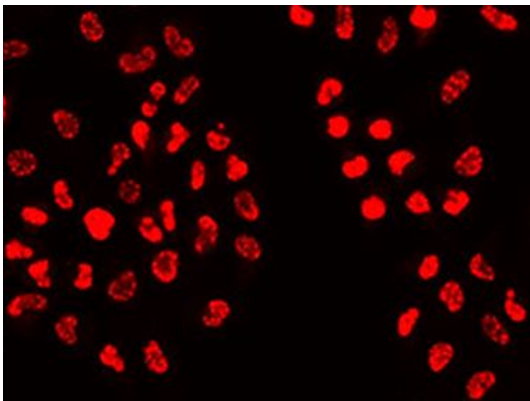
Gene Symbol	ATR
Gene Full Name	ATR serine/threonine kinase
Background	The protein encoded by this gene is a serine/threonine kinase and DNA damage sensor, activating cell cycle checkpoint signaling upon DNA stress. The encoded protein can phosphorylate and activate several proteins involved in the inhibition of DNA replication and mitosis, and can promote DNA repair, recombination, and apoptosis. This protein is also important for fragile site stability and centrosome duplication. Defects in this gene are a cause of Seckel syndrome 1. [provided by RefSeq, Aug 2017]
Function	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. [UniProt]
Calculated Mw	301 kDa
PTM	Phosphorylated; autophosphorylates in vitro. [UniProt]
Cellular Localization	Nucleus. Nucleus, PML body. Chromosome. Note=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. [UniProt]

Images



ARG43224 anti-ATR phospho (Ser428) antibody WB image

Western blot: NIH/3T3 cells were treated by Nocodazole (50 ng/ml, 37°C, 20 hours) (left lane). NIH/3T3 cells were treated by UV (RT, 15-30 min) (middle lane). Untreated NIH/3T3 cells (right lane). 25 µg of cell lysates were stained with ARG43224 anti-ATR phospho (Ser428) antibody at 1:1000 dilution.



ARG43224 anti-ATR phospho (Ser428) antibody ICC/IF image

Immunofluorescence: U2OS cells stained with ARG43224 anti-ATR phospho (Ser428) antibody at 1:100 dilution.