

#2851 Store at -20C

Phospho-(Ser/Thr) ATM/ATR Substrate Antibody



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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: WB, IP, E-P	Reactivity: All	Sensitivity: Endogenous	Source: Rabbit
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Product Usage Information	Application Western Blotting Immunoprecipitation Peptide ELISA (DELFI A)	Dilution 1:1000 1:20 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	Phospho-(Ser/Thr) ATM/ATR Substrate Antibody detects endogenous levels of proteins containing the ATM/ATR substrate motif. This antibody preferentially binds peptides and proteins that contain phospho-Ser/Thr preceded by Leu or similar hydrophobic amino acids at the -1 position and followed by Gln at the +1 position. The antibody does not cross-react with corresponding nonphosphorylated sequences or with other phospho-Ser/Thr-containing motifs. (U.S. Patent No's.: 6,441,140; 6,982,318; 7,259,022; 7,344,714; U.S.S.N. 11,484,485; and all foreign equivalents.)	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with synthetic phospho-(Ser/Thr) ATM/ATR substrate peptides. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Ataxia telangiectasia mutated kinase (ATM) and ataxia telangiectasia and Rad3-related kinase (ATR) are related kinases that regulate cell cycle checkpoints and DNA repair (1). The identified substrates for ATM are p53, p95/NBS1, MDM2, Chk2, BRCA1, CtIP, 4E-BP1, and Chk1 (1,2) The essential requirement for the substrates of ATM/ATR is S	
Background References	1. Kastan, M.B. and Lim, D.S. (2000) <i>Nat Rev Mol Cell Biol</i> 1, 179-86. 2. Zhao, H. and Piwnicka-Worms, H. (2001) <i>Mol Cell Biol</i> 21, 4129-39. 3. Kim, S.T. et al. (1999) <i>J Biol Chem</i> 274, 37538-43.	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting IP: Immunoprecipitation E-P: Peptide ELISA (DELFI A)
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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