#12110 Store at -20°C

Phospho-MERIT40 (Ser29) Antibody

☑100 µl
(10 western blots)

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For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #29086
UniProt Acc. #Q9NWV8

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP	H, Mk	40 kDa	Rabbit**
Endogenous			

Background: The breast cancer susceptibility gene, BRCA1, codes for an E3 ubiquitin ligase that functions in the maintenance of genome stability through regulation of DNA damage response and DNA repair. BRCA1 forms at least three distinct complexes (BRCA1 A, B, and C) with other DNA repair proteins, and these interactions are vital for the regulation of BRCA1 function. One such complex, the BRCA1-Rap80 complex (BRCA1 A complex), includes Rap80, BRCC36, BRCC45, Abraxas, and MERIT40/NBA1, and functions in G2/M phase checkpoint control (reviewed in 1,2).

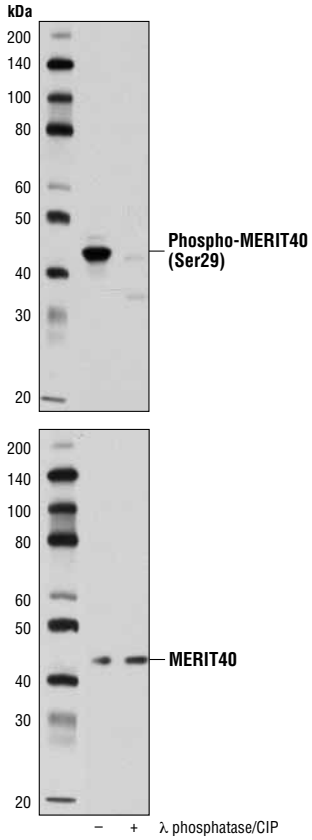
MERIT40/NBA1 localizes to sites of DNA damage and is required for the appropriate localization of BRCA1 in response to ionizing radiation, as well as maintenance of the BRCA1 A complex (3,4). Proteomics studies have identified Ser29 as a phosphorylated site on MERIT40/NBA1, and the significance of this phosphorylation is under investigation (5-9).

Specificity/Sensitivity: Phospho-MERIT40 (Ser29) Antibody recognizes endogenous levels of MERIT40 protein only when phosphorylated at Ser29.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser29 of human MERIT40 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

(1) Ohta, T. et al. (2011) *FEBS Lett* 585, 2836-44.
(2) Huen, M.S. et al. (2010) *Nat Rev Mol Cell Biol* 11, 138-48.
(3) Wang, B. et al. (2009) *Genes Dev* 23, 729-39.
(4) Shao, G. et al. (2009) *Genes Dev* 23, 740-54.
(5) Moritz, A. et al. (2010) *Sci Signal* 3, ra64.
(6) Rigbolt, K.T. et al. (2011) *Sci Signal* 4, rs3.
(7) Iliuk, A.B. et al. (2010) *Mol Cell Proteomics* 9, 2162-72.
(8) Wu, F. et al. (2010) *Mol Cell Proteomics* 9, 1616-32.
(9) Mayya, V. et al. (2009) *Sci Signal* 2, ra46.



Western blot analysis of extracts from A-431 cells, untreated (-) or treated with λ phosphatase and calf intestinal phosphatase (CIP) (+), using Phospho-MERIT40 (Ser29) Antibody (upper) or MERIT40 Antibody #9500 (lower).

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.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

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Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide
Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **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 **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.