

MERIT40 (D7Y5K) Rabbit mAb



✓ 100 µl
 (10 western blots)

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

Entrez-Gene ID #29086
 Swiss-Prot Acc. #Q9NWX8

Applications W, IP Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 40 kDa	Isotype Rabbit**
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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. The BRCA1-Rap80 complex (BRCA1 A complex), including Rap80, BRCC36, BRCC45, Abraxas, and MERIT40/NBA1, functions in G2/M phase checkpoint control (reviewed in 1,2).

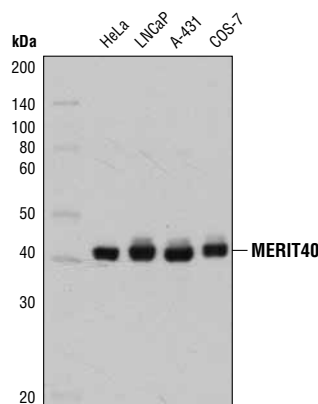
MERIT40/NBA1 localizes to sites of DNA damage and is required for the appropriate localization of BRCA1 in response to ionizing radiation, as well as maintenance of the BRCA1 A complex (3,4). Proteomics studies have identified Ser29 as a phosphorylated site on MERIT40/NBA1, and the significance of this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

Specificity/Sensitivity: MERIT40 (D7Y5K) Rabbit mAb recognizes endogenous levels of total MERIT40 protein.

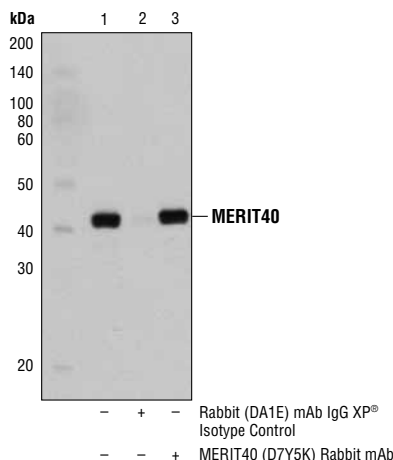
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human MERIT40 protein.

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 various cell lines using MERIT40 (D7Y5K) Rabbit mAb.



Immunoprecipitation of MERIT40 from HeLa cell extracts using Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 2) or MERIT40 (D7Y5K) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using MERIT40 (D7Y5K) Rabbit mAb. A light-chain specific secondary antibody was used.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. 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 1:200

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

Please visit www.cellsignaling.com for a complete listing of recommended complementary products.

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

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.