

BRE (D8Q1J) Rabbit mAb

✓ 100 µl
 (10 western blots)



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

Entrez-Gene ID #9577
Swiss-Prot Acc. #Q9NXR7

Applications W, IP Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 45 kDa	Isotype Rabbit IgG**
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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 the DNA damage response and DNA repair. BRCA1 protein forms at least three distinct complexes (BRCA1 A, B, and C) with other DNA repair proteins, and these interactions are vital for regulation of BRCA1 function. The BRCA1 A complex includes Rap80, BRCC36, Abraxas, MERIT40/NBA1, and BRE/BRCC45 and functions in G2/M phase checkpoint control (reviewed in 1,2). MERIT40 and BRE maintain the stability of both the BRCA1 A complex and the cytoplasmic BRISC complex, which contains BRCC36 and ABR01 but not BRCA1 (3).

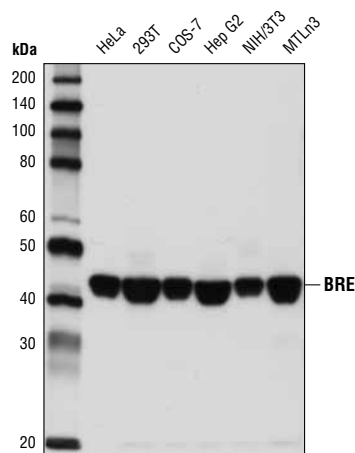
Researchers have shown that the expression level of BRE is related to patient survival in breast cancer (4), and it may predict a favorable outcome in acute myeloid leukemia (AML) (5,6). Studies have also shown that BRE is overexpressed in human hepatocellular carcinoma (7) and that overexpression of BRE can cause resistance to apoptotic signaling and promote tumor growth (7,8).

Specificity/Sensitivity: BRE (D8Q1J) Rabbit mAb recognizes endogenous levels of total BRE protein.

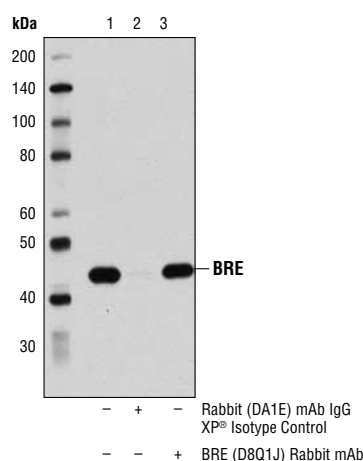
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln150 of human BRE protein.

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) Hu, X. et al. (2011) *J Biol Chem* 286, 11734-45.
- (4) Noordermeer, S.M. et al. (2012) *Breast Cancer Res Treat* 135, 125-33.
- (5) Noordermeer, S.M. et al. (2011) *Blood* 118, 5613-21.
- (6) Balgobind, B.V. et al. (2010) *Leukemia* 24, 2048-55.
- (7) Chan, B.C. et al. (2008) *Oncogene* 27, 1208-17.
- (8) Chui, Y.L. et al. (2010) *Biochem Biophys Res Commun* 391, 1522-5.



Western blot analysis of extracts from various cell lines using BRE (D8Q1J) Rabbit mAb.



Immunoprecipitation of BRE from HeLa cell extracts using Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 2) or BRE (D8Q1J) Rabbit mAb (lane 3). Lane 1 is 10% input. Western blot analysis was performed using BRE (D8Q1J) 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 1:50

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 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.