

BRCA1Polyclonal Antibody

Catalog Number: E90212

Amount: 100ul

Background: The breast cancer susceptibility proteins BRCA1 and BRCA2 are frequently mutated in

cases of hereditary breast and ovarian cancers and have roles in multiple processes related to DNA damage, repair, cell cycle progression, transcription, ubiquitination and apoptosis (1-4). BRCA2 has been shown to be required for localization of Rad51 to sites of double stranded breaks (DSBs) in DNA, and cells lacking BRCA1 and BRCA2 cannot repair DSBs through the Rad51-dependent process of homologous recombination (HR) (5). Numerous DNA-damage induced phosphorylation sites on BRCA1 have been identified, including serines 988, 1189, 1387, 1423, 1457, 1524 and 1542, and kinases activated in a cell cycle-dependent manner, including Aurora A and CDK2, can also phosphorylate BRCA1 at Ser308 and Ser1497, respectively (6-10). Cell cycle-dependent phosphorylation of BRCA2 at Ser3291 by CDKs has been proposed as a mechanism to switch off HR as cells progress beyond S-phase by blocking the carboxy-terminal Rad51 binding site (11).

Species: Rabbit **Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide,

50% glycerol, pH7.3.

Synonyms: BRCA1;BRCAI;BRCC1;BROVCA1;IRIS;PSCP;RNF53;

Immunogen: Center-peptideof human BRCA1

Purification: Affinity purification

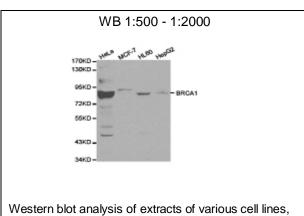
Reactivity: H
Applications: WB
Molecular Weight: 208kDa
Swiss-Prot No.: P38398

Gene ID: 672

References: 1. Rahman, N. and Stratton, M.R. (1998) Annu. Rev. Genet. 32, 95-121. 2. Gayther, S. A. et

al. (1999) Am. J. Hum. Genet. 65, 1021-1029. 3. Kerr, P. and Ashworth, A. (2001) Curr. Biol. 11, R668-R676. 4. Scully, R. and Livingston, D.M. (2000) Nature 408, 429-432. 5. Tutt, A. and Ashworth, A. (2002) Trends Mol. Med. 8, 571-576. 6. Okada, S. and Ouchi, T. (2003) J. Biol. Chem. 278, 2015-2020. 7. Cortez, D. et al. (1999) Science 286, 1162-1166. 8. Xu, B. et al. (2002) Cancer Res. 62, 4588-4591. 9. Ouchi, M. et al. (2004) J. Biol. Chem. 279, 19643-19648. 10. Ruffner, H. et al. (1999) Mol. Cell. Biol. 19, 4843-4854. 11. Esashi, F. et al.

(2005) Nature 434, 598-604.



Western blot analysis of extracts of various cell lines using BRCA1 antibody.