

## Rabbit Anti-BRCA1 Polyclonal Antibody

CPB-775RH Rabbit(BRCA1)

Lot. No. (See product label)

### PRODUCT INFORMATION

|                            |   |
|----------------------------|---|
| <b>Product Overview</b>    | Rabbit Anti-BRCA1 Polyclonal Antibody   |
| <b>Antigen Description</b> | The BRCA1-BARD1 heterodimer coordinates a diverse range of cellular pathways such as DNA damage repair, ubiquitination and transcriptional regulation to maintain genomic stability. Acts by mediating ubiquitin E3 ligase activity that is required for its tumor suppressor function. Plays a central role in DNA repair by facilitating cellular response to DNA repair. Required for appropriate cell cycle arrests after ionizing irradiation in both the S-phase and the G2 phase of the cell cycle. Involved in transcriptional regulation of P21 in response to DNA damage. Required for FANCD2 targeting to sites of DNA damage. May function as a transcriptional regulator. Inhibits lipid synthesis by binding to inactive phosphorylated ACACA and preventing its dephosphorylation. |
| <b>specificity</b>         | The antibody detects endogenous level of BRCA1 only when phosphorylated at serine 1423.   |
| <b>Target</b>              | BRCA1   |
| <b>Immunogen</b>           | Peptide sequence around phosphorylation site of serine 1423(H-G-S(p)-Q-P) derived from Human BRCA1.   |
| <b>Host</b>                | Rabbit  |
| <b>Species</b>             | Human   |
| <b>Cross Reactivity</b>    | Human   |
| <b>conjugation</b>         | N/A   |
| <b>Applications</b>        | WB,IHC  |

### PACKAGING

|                |   |
|----------------|---|
| <b>Format</b>  | Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| <b>Storage</b> | Store at -20°C /1 year  |

### ANTIGEN GENE INFORMATION

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|------------------------|---|
| <b>Gene Name</b>       | <a href="#">BRCA1 breast cancer 1, early onset [ Homo sapiens ]</a>   |
| <b>Official Symbol</b> | BRCA1   |
| <b>Synonyms</b>        | BRCA1; breast cancer 1, early onset; breast cancer type 1 susceptibility protein; BRCA1/BRCA2 containing complex; subunit 1; BRCC1; PPP1R53; protein phosphatase 1; regulatory subunit 53; RNF53; RING finger protein 53; BRCA1/BRCA2-containing complex, subunit 1; protein phosphatase 1, regulatory subunit 53; breast and ovarian cancer susceptibility protein 1; breast and ovarian cancer susceptibility protein 1; IRIS; PSCP; BRCAI; PNCA4; BROVCA1; |
| <b>GeneID</b>          | <a href="#">672</a>   |
| <b>mRNA Refseq</b>     | <a href="#">NM_007294</a>   |
| <b>Protein Refseq</b>  | <a href="#">NP_009225</a>   |
| <b>MIM</b>             | <a href="#">113705</a>  |

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|----------------------------|---|
| <b>UniProt ID</b>          | P38398  |
| <b>Chromosome Location</b> | 17q21-q24   |
| <b>Pathway</b>             | ATF-2 transcription factor network, organism-specific biosystem; ATM mediated phosphorylation of repair proteins, organism-specific biosystem; ATM mediated response to DNA double-strand break, organism-specific biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; Aurora A signaling, organism-specific biosystem; BARD1 signaling events, organism-specific biosystem; BRCA1-associated genome surveillance complex (BASC), organism-specific biosystem; |
| <b>Function</b>            | DNA binding; DNA binding; RNA binding; androgen receptor binding; damaged DNA binding; enzyme binding; ligase activity; metal ion binding; protein binding; transcription coactivator activity; transcription regulatory region DNA binding; tubulin binding; ubiquitin protein ligase binding; ubiquitin-protein ligase activity; contributes_to ubiquitin-protein ligase activity; zinc ion binding;  |