

## **Anti-BRCA1 Rabbit Monoclonal Antibody**

### Introduction

E3 ubiquitin-protein ligase that specifically mediates the formation of 'Lys-6'-linked polyubiquitin chains and plays a central role in DNA repair by facilitating cellular responses to DNA damage. It is unclear whether it also mediates the formation of other types of polyubiquitin chains. The E3 ubiquitin-protein ligase activity is required for its tumor suppressor function. The BRCA1-BARD1 heterodimer coordinates a diverse range of cellular pathways such as DNA damage repair, ubiquitination and transcriptional regulation to maintain genomic stability. Regulates centrosomal microtubule nucleation. Required for normal cell cycle progression from G2 to mitosis. 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. Contributes to homologous recombination repair (HRR) via its direct interaction with PALB2, fine-tunes recombinational repair partly through its modulatory role in the PALB2-dependent loading of BRCA2-RAD51 repair machinery at DNA breaks. Component of the BRCA1-RBBP8 complex which regulates CHEK1 activation and controls cell cycle G2/M checkpoints on DNA damage via BRCA1-mediated ubiquitination of RBBP8. Acts as a transcriptional activator (PubMed:20160719).

# Product parameters

Alternative Names	BRCA1; RNF53; Breast cancer type 1 susceptibility protein; RING finger protein 53
Gene ID	672
Gene Name	BRCA1
SwissProt ID	P38398
Host	Rabbit
Reactivity	Human
Molecular Weight	-
Conjugation	Unconjugated
Ex	APEXBIO
Em	-
Modification	Unmodified
Clonality	IgG
Isotype	Monoclonal Antibody
Clonality No.	AP-10A5F12

Form	Liquid
Concentration	See label
Carrier	Carrier Not Free
Immunogen	A synthesized peptide derived from human BRCA1
Purification	Affinity Purified
Buffer System	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Ap <mark>plica</mark> tion	IHC-P O
Dilution Ratio	IHC: 1/100-1/200
Research Field	Epigenetics and Nuclear Signaling
Product Categories	Primary antibody
Shipping	Blue ice
Storage	-20°C
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.

### Protocol

Configure the product according to the application range and recommended dilution ratio.

\*Note: The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).

### Note

1. This product is for scientific research use only.













