

## BRCA1 Primary Antibody

Clone: BRCA1/13502R (Rabbit Monoclonal)

**Localization** – Cytoplasm

**Host Species** – Rabbit

**Ig Class** – IgG, kappa

### Intended Use

This antibody is designed for the specific localization of BRCA1 in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

### Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

### Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

### Product Description

BRCA1 (breast and ovarian cancer susceptibility protein 1) is a nuclear phosphoprotein that functions as a key regulator of genomic integrity and serves as a tumor suppressor. In coordination with other tumor suppressors, DNA damage sensors, and signal transducers, it forms the BRCA1-associated genome surveillance complex (BASC), a large multiprotein assembly involved in genome monitoring and repair. BRCA1 associates with RNA polymerase II and, via its C-terminal domain, interacts with the histone deacetylase complex, thereby contributing to transcriptional regulation, DNA double-strand break repair, and homologous recombination. Pathogenic variants in the BRCA1 gene account for approximately 40% of hereditary breast cancers and over 80% of combined hereditary breast and ovarian cancers. Alternative splicing modulates the subcellular localization and functional properties of BRCA1, with multiple transcript variants reported, several of which correspond to disease-associated mutations. However, the complete sequence structures of many isoforms remain undefined. A related pseudogene has also been identified on chromosome 17

### Material Supplied

BRCA1 antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

### Material required But Not Supplied

- Xylene
- Isopropyl alcohol
- Positive charged slides
- Wash Buffer
- DI Water
- Antigen retrieval buffers
- Blocking Reagents
- Detection System
- Control Tissues
- Hematoxylin
- Mounting media
- Cover glass

### Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

### Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

<b>Control Tissue</b>	Human breast, ovarian
<b>Dilution factor</b>	<b>1:20-50</b> (Antibody Diluent: DH144)

<b>Antibody Incubation Time</b>	30-60 Minutes at RT
<b>Retrieval Pre-treatment</b>	<b>Tris-EDTA based HIER</b> (AR9 Buffer: DH020)

### Precautions

*This product should be used by qualified and trained professional users only.*

Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contain sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.







### Limitations

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

### Troubleshooting

For Technical Support contact us at +91 - 7506501122 or [info@dygnova.com](mailto:info@dygnova.com) or your local distributor to report unusual staining.

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	Manufacturer Details		Use by Date	<b>LOT</b>	Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use	<b>REF</b>	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	<b>IVD</b>	In-vitro Diagnostic Medical Device