

Datasheet: MCA5944GT

BATCH NUMBER 152401

Description:	MOUSE ANTI BRCA1 (N-TERMINAL)
Specificity:	BRCA1 (N-TERMINAL)
Other names:	BREAST CANCER TYPE 1 SUSCEPTIBILITY PROTEIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	BR64
Isotype:	IgG1
Quantity:	50 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.1% Sodium Azide (NaN₃)

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Purified protein corresponding to amino acids 1-100 within the N-Terminal region of Human BRCA1.

External Database Links

UniProt:

[P38398](#) [Related reagents](#)

[P48754](#) [Related reagents](#)

Entrez Gene:

[672](#) BRCA1 [Related reagents](#)

[12189](#) Brca1 [Related reagents](#)

Synonyms RNF53

Fusion Partners Spleen cells from immunised mice were fused with cells of the mouse NSI myeloma cell line.

Specificity **Mouse anti Human BRCA1 antibody, clone BR64** recognizes an epitope within the 100 amino acid N-Terminal (NT) region of human BRCA1, otherwise known as breast cancer type 1 susceptibility protein, a tumor suppressor gene and major player in DNA damage repair, predominantly expressed in the nucleus during the S/G2 phase of the cell cycle.

Along with BRCA2, BRCA1 is a high risk gene which is associated with hereditary breast and ovarian cancers, particularly at a younger age of diagnosis. Women carrying the BRCA1 mutation have a 50-95% chance of developing breast cancer in later life, but genetic screening and increased awareness of preventative surgery can reduce this risk significantly ([Ford et al. 1994](#)). Deleterious BRCA1 mutations may also increase the risk of other cancers in both males and females including pancreatic cancer, although in males pancreatic and prostate cancer appear to be more strongly associated with BRCA2 gene mutations.

BRCA1 is a key marker of triple-negative breast cancer/TNBC (ER-/PR-/HER2-), a high risk aggressive cancer which makes up about 15% of invasive breast cancers, and which lacks the benefit of specific therapy that targets the three major proteins ER/PR/HER2. Triple-negative tumors are predominantly basal-like, poorly differentiated and of higher [histological grade](#). Younger women have an increased rate of basal or BRCA related TNBC, compared with the higher proportion of apocrine, normal-like and rare subtypes of TNBC, seen in older women.

During the characterization of clone BR64, it was determined that this antibody can be used in the identification of both native and denatured BRCA1, recognizing an epitope within amino acids 80-100 ([Maul, G.G. et al.](#)).

Mouse anti Human BRCA1 antibody, clone BR64 is suitable for use in immunofluorescence, showing both a nuclear distribution and reaction with the centrosome.

Western Blotting Please refer to [Maul, G.G. et al.](#) for details.

Storage Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA5944GT10040>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

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