Technical Data Sheet

InVivoMAb anti-human BRCA1

Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at https://bioxcell.com/terms-and-conditions.

Lot Specific Information

Lot Number: **Lot Specific***
Volume: **Lot Specific***
Concentration: **Lot Specific* (generally 4 to 11 mg/ml) ***
Total Protein: **Lot Specific***

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number:	**BE0409**
Clone:	**BR64**
Isotype:	Mouse IgG1, κ
Recommended Isotype Control(s):	InVivoMAb mouse IgG1 isotype control, unknown specificity
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Recombinant 6XHis-BRCA1 fusion protein
Reported Applications:	Immunofluorescence Western blot Immunoprecipitation Electrophoretic mobility shift assays (EMSA)
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤1EU/mg (≤0.001EU/μg) Determined by LAL gel clotting assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm filtered
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
RRID:	
Molecular Weight:	150 kDa

Description

The BR64 monoclonal antibody reacts with BRCA1, a nuclear E3 ubiquitin-protein ligase that is involved in tumor suppression, transcription, genomic stability, DNA repair of double-stranded breaks, and recombination. BRCA1 exhibits heterodimeric interaction with BARD1 and is a member of the BRCA1-A complex, the BRCA1-RBBP8 complex, the BRCA complex (BRCA1, BRCA2, and PALB2), and the BRCA1-associated genome surveillance complex (BASC). Other members of BASC include MSH2, MSH6, MLH1, ATM, BLM, PMS2, and the MRE11-RAD50-NBN protein (MRN) complex. BRCA1's interaction with RBBP8 is critical to BRCA1-dependent G2/M checkpoint control of DNA damage. BRCA1 associates with the RNA polymerase II holoenzyme and also interacts with several proteins, including SMC1A, NELFB, CHEK1/CHEK2, BAP1, BRCC3, UBXN1, BRIP1, FANCD2, H2AX, and ACACA. BRCA1 interacts with LMO4 via the BRCT domain, and this interaction represses the transcriptional activity of BRCA1. BRCA1 is required for the targeting of FANCD2 to DNA damage sites and is also essential to the centrosomal microtubule nucleation as well as the S-phase and G2-phase cell cycle arrests after exposure to ionizing irradiation. BRCA1 is established as a tumor suppressor, and germline BRCA1 mutations are often linked to an increased risk of familial breast and ovarian cancer incidences.

Storage

Store at the stock concentration at 4°C . **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at https://bioxcell.com/faqs.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/be0409?bxcs=9k1b3a#tab_references or scan the QR code below.

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