

Instructions For Use

RA0754-C-IFU-RUO

Rev. Date: Oct 3, 2025

Revision: 1

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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

BRCA1 (Breast Marker); Clone BRCA1/1398 (Concentrate)

Availability/Contents: <u>Item #</u> <u>Volume</u>

RA0754-C.1 0.1 ml RA0754-C.5 0.5 ml RA0754-C1 1 ml

Description:

Species: Mouse

Immunogen: Recombinant human BRCA1 protein fragment (around aa445-620) (exact sequence is

proprietary)

Clone: BRCA1/1398 Isotype: IgG1 / Kappa

Entrez Gene ID: 672 Hu Chromosome Loc.: 17q21

Synonyms: Breast cancer type 1 susceptibility protein, RING finger protein 53, RING-type E3 ubiquitin

transferase BRCA1, BRCA1; Breast and ovarian cancer susceptibility protein 1; Breast Cancer 1 Early Onset; Breast cancer type 1 susceptibility protein; BROVCA1; IRIS; PNCA4; PPP1R53;

Protein phosphatase 1 regulatory subunit 53; PSCP; RING finger protein 53; RNF53

Mol. Weight of Antigen: 220kDa

Format: 200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM

PBS with 0.05% BSA & 0.05% azide.

Specificity: Recognizes a protein of 220kDa, identified as BRCA1.

Background: This gene encodes a nuclear phosphoprotein that plays a role in maintaining genomic stability,

and it also acts as a tumor suppressor. The encoded protein combines with other tumor suppressors, DNA damage sensors, and signal transducers to form a large multi-subunit protein complex known as the BRCA1-associated genome surveillance complex (BASC). This gene product associates with RNA polymerase II, and through the C-terminal domain, also interacts with histone deacetylase complexes. This protein thus plays a role in transcription, DNA repair of double-stranded breaks, and recombination. Mutations in this gene are

responsible for approximately 40% of inherited breast cancers and more than 80% of inherited breast and ovarian cancers. Alternative splicing plays a role in modulating the subcellular

localization and physiological function of this gene.

Species Reactivity: Human

Positive Control: A431 or HeLa cells. Breast, Ovarian or Renal Cell Carcinoma.

Cellular Localization: Chromosome, Cytoplasm, Nucleus

Titer/ Working Dilution: Immunohistochemistry (Frozen and Formalin-fixed): 1-2µg/ml

Microbiological State: This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 U.S.A.



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Uses/Limitations: Not to be taken internally.

For Research Use Only.

This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded

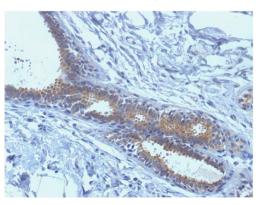
tissue sections, to be viewed by light

microscopy.

Do not use if reagent becomes cloudy. Do not use past expiration date.

Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with BRCA1 Mouse Monoclonal Antibody (BRCA1/1398).

Procedure:

- 1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time: We suggest an incubation period of 30 minutes at room temperature.
 However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- 3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).

Do not pipette by mouth.

Avoid contact of reagents and specimens with skin and mucous membranes.

Avoid microbial contamination of reagents or increased nonspecific staining may occur.

This product contains no hazardous material at a <u>reportable concentration</u> according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Miki, Y., et al. 1994. A strong candidate for the breast and ovarian cancer susceptibility gene BRCA1. Science 266: 66-71.

Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C 8° C

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