BRCA1 monoclonal antibody, clone 3A2

Catalog # MAB6119 Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against partial recombinant BRCA1.
Immunogen	Recombinant GST fusion protein corresponding to amino acids 762-1315 of human BRCA1.
Host	Mouse
Reactivity	Human
Specificity	This antibody recognizes full-length BRCA1, a 220 kD nuclear phosphoprotein, and does not recognize the Deltaexon 11 splice variant.
Form	Liquid
Isotype	IgG1, kappa
Recommend Usage	Western Blot (1-10 ug/mL) Immunoprecipitation (1-10 ug/mL) Immunohistochemistry (1-10 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot
- Immunohistochemistry
- Immunoprecipitation

Gene Info — BRCA1

Entrez GeneID	672
Gene Name	BRCA1
Gene Alias	BRCAI, BRCC1, IRIS, PSCP, RNF53
Gene Description	breast cancer 1, early onset
Omim ID	113705
Gene Ontology	Hyperlink
Gene Summary	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. Many alternatively spliced transcript variants, some of which are disease-associated mutations, have been described for this gene, but the full-length natures of only some of these variants has been described. A related pseudogene, which is also located on chromosome 17, has been identified. [provided by RefSeq
Other Designations	BRCA1/BRCA2-containing complex, subunit 1|breast and ovarian cancer susceptibility protein 1

Publication Reference

- The nuclear localization sequences of the BRCA1 protein interact with the importin-alpha subunit of the nuclear transport signal receptor.

  Chen CF, Li S, Chen Y, Chen PL, Sharp ZD, Lee WH.

  The Journal of Biological Chemistry 1996 Dec; 271(51):32863.

  Application: WB-Tr, Human, DU 145 cells

- BRCA1 is a 220-kDa nuclear phosphoprotein that is expressed and phosphorylated in a cell cycle-dependent manner.

  Chen Y, Farmer AA, Chen CF, Jones DC, Chen PL, Lee WH.

  Cancer Research 1996 Jul; 56(14):3168.

  Application: IF, IP, WB-Ce, WB-Tr, Human, Insect, HBL100, SF9, T24 cells

- Aberrant subcellular localization of BRCA1 in breast cancer.

  Chen Y, Chen CF, Riley DJ, Allred DC, Chen PL, Von Hoff D, Osborne CK, Lee WH.

  Science 1995 Nov; 270(5237):789.

  Application: IF, IHC, IP, WB-Ce, Human, HBL100 cells, Human breast cancer

Pathway

- Ubiquitin mediated proteolysis

Disease

- Abdominal Neoplasms
- Abortion
- Adenocarcinoma
- Adenoma
- Anticipation
- Anxiety Disorders
- Ataxia telangiectasia
- Awareness
- Bloom Syndrome
- Body Image
- Body Weight
- Brain Neoplasms
- Breast cancer
- Breast Neoplasms
- Carcinoma
- Carcinoma in Situ
- Cell Transformation

- Choice Behavior
- Chromosome Aberrations
- Chromosome Breakage
- Chromosome Deletion
- Cocarcinogenesis
- Colon cancer
- Colonic Neoplasms
- Colorectal Neoplasms
- Concept Formation
- Counseling
- Cystadenocarcinoma
- Decision Making
- Discrimination (Psychology)
- Disease Progression
- DNA Damage
- Endometrial Neoplasms
- Esophageal Neoplasms
- Fallopian Tube Neoplasms
- Fanconi Anemia
- Fatigue
- Functional Laterality
- Genetic Diseases
- Genetic Predisposition to Disease
- Glioblastoma
- Glioma
- Hamartoma Syndrome

- Hematologic Diseases
- Hodgkin Disease
- Hyperplasia
- Hyperthyroidism
- Infertility
- Kidney Failure
- Knowledge of Results (Psychology)
- Leukemia
- Li-Fraumeni Syndrome
- Lung Neoplasms
- Lymphatic Metastasis
- Lymphoma
- Lymphoproliferative Disorders
- Malignant melanoma
- Melanoma
- Meningomyelocele
- Menopause
- Microsatellite Instability
- Multiple Sclerosis
- Narcolepsy
- Neoplasm Invasiveness
- Neoplasm Metastasis
- Neoplasm Recurrence
- Neoplasms
- Neoplastic Syndromes

- Obesity
- Occupational Diseases
- Ovarian cancer
- Ovarian Diseases
- Ovarian Neoplasms
- Pancreatic cancer
- Pancreatic Neoplasms
- Papillomavirus Infections
- Perception
- Peritoneal Neoplasms
- Personal Autonomy
- Personality Inventory
- Peutz-Jeghers Syndrome
- Precancerous Conditions
- Pregnancy Complications
- Prostate cancer
- Prostatic Neoplasms
- Psychological Tests
- Psychology
- Psychometrics
- Pulmonary Disease
- Radiation Injuries
- Recurrence
- Salivary Gland Neoplasms
- Skin Neoplasms
- Sleep

- Sleep Disorders
- Spinal Dysraphism
- Spinocerebellar ataxia
- Stomach Neoplasms
- Stress
- Tay-Sachs disease
- Tobacco Use Disorder
- Urinary Bladder Neoplasms
- Uterine Cervical Neoplasms
- Waldenstrom Macroglobulinemia
- Werner syndrome