

## Product datasheet

# Anti-BRCA2 antibody ab27976

★★★★☆ 1 Abreviews 10 References 2 图像

### 概述

产品名称	Anti-BRCA2抗体
描述	兔多克隆抗体to BRCA2
宿主	Rabbit
特异性	ab27976 recognises BRCA2.
经测试应用	适用于: WB, IP, IHC-P
种属反应性	与反应: Mouse, Human
免疫原	Synthetic peptide mapping to the N terminus of human BRCA2.
阳性对照	WB: mouse cell line SV-T2 lysate

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: 0.02% Thimerosal (merthiolate) Constituents: 50% Glycerol, 1% BSA, PBS, pH 7.2
纯度	Immunogen affinity purified
纯化说明	This antibody is peptide affinity purified
克隆	多克隆
同种型	IgG

### 应用

Our [Abpromise guarantee](#) covers the use of **ab27976** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
WB		Use a concentration of 1 - 4 µg/ml. Predicted molecular weight: 384 kDa.Can be blocked with <a href="#">BRCA2 peptide (ab69799)</a> .

应用	Ab评论	说明
IP		Use at an assay dependent concentration. PubMed: 24210700
IHC-P	★★★★☆	Use at an assay dependent concentration.

## 靶标

### 功能

Involved in double-strand break repair and/or homologous recombination. Binds RAD51 and potentiates recombinational DNA repair by promoting assembly of RAD51 onto single-stranded DNA (ssDNA). Acts by targeting RAD51 to ssDNA over double-stranded DNA, enabling RAD51 to displace replication protein-A (RPA) from ssDNA and stabilizing RAD51-ssDNA filaments by blocking ATP hydrolysis. May participate in S phase checkpoint activation. Binds selectively to ssDNA, and to ssDNA in tailed duplexes and replication fork structures.

### 组织特异性

Highest levels of expression in breast and thymus, with slightly lower levels in lung, ovary and spleen.

### 疾病相关

Defects in BRCA2 are a cause of susceptibility to breast cancer (BC) [MIM:114480]. A common malignancy originating from breast epithelial tissue. Breast neoplasms can be distinguished by their histologic pattern. Invasive ductal carcinoma is by far the most common type. Breast cancer is etiologically and genetically heterogeneous. Important genetic factors have been indicated by familial occurrence and bilateral involvement. Mutations at more than one locus can be involved in different families or even in the same case.

Defects in BRCA2 are the cause of pancreatic cancer type 2 (PNCA2) [MIM:613347]. It is a malignant neoplasm of the pancreas. Tumors can arise from both the exocrine and endocrine portions of the pancreas, but 95% of them develop from the exocrine portion, including the ductal epithelium, acinar cells, connective tissue, and lymphatic tissue.

Defects in BRCA2 are a cause of susceptibility to breast-ovarian cancer familial type 2 (BROVCA2) [MIM:612555]. A condition associated with familial predisposition to cancer of the breast and ovaries. Characteristic features in affected families are an early age of onset of breast cancer (often before age 50), increased chance of bilateral cancers (cancer that develop in both breasts, or both ovaries, independently), frequent occurrence of breast cancer among men, increased incidence of tumors of other specific organs, such as the prostate.

Defects in BRCA2 are the cause of Fanconi anemia complementation group D type 1 (FANCD1) [MIM:605724]. It is a disorder affecting all bone marrow elements and resulting in anemia, leukopenia and thrombopenia. It is associated with cardiac, renal and limb malformations, dermal pigmentary changes, and a predisposition to the development of malignancies. At the cellular level it is associated with hypersensitivity to DNA-damaging agents, chromosomal instability (increased chromosome breakage) and defective DNA repair.

Defects in BRCA2 are a cause of glioma type 3 (GLM3) [MIM:613029]. Gliomas are benign or malignant central nervous system neoplasms derived from glial cells. They comprise astrocytomas and glioblastoma multiforme that are derived from astrocytes, oligodendrogliomas derived from oligodendrocytes and ependymomas derived from ependymocytes.

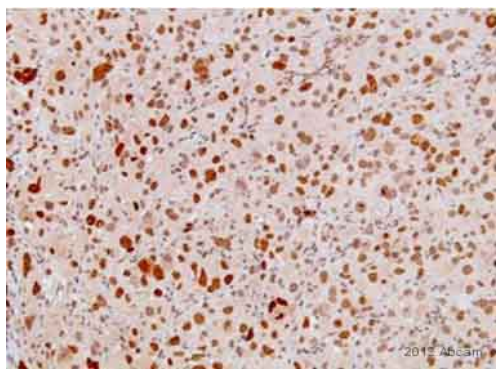
### 序列相似性

Contains 8 BRCA2 repeats.

### 翻译后修饰

Phosphorylated by ATM upon irradiation-induced DNA damage.

Ubiquitinated in the absence of DNA damage; this does not lead to proteasomal degradation. In contrast, ubiquitination in response to DNA damage leads to proteasomal degradation.



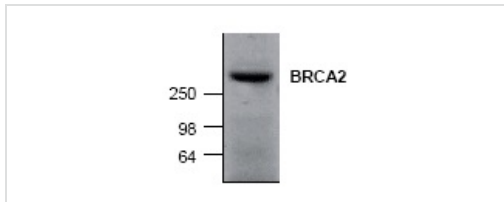
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-BRCA2 antibody (ab27976)

Image courtesy of an anonymous Abreview.

ab27976 staining BRCA2 in a xenograft MDA-MB-231 of human breast cancer by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

Tissue was fixed in formaldehyde and a heat mediated antigen retrieval step was performed using citrate buffer pH 6.0.

Samples were then blocked with 3% BSA for 30 minutes at 25°C and then incubated with ab27976 at a 1/50 dilution for 16 hours at 25°C. The secondary used was an undiluted HRP conjugated goat anti-rabbit polyclonal.



Western blot - Anti-BRCA2 antibody (ab27976)

Anti-BRCA2 antibody (ab27976) at 4 µg/ml + HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

**Predicted band size:** 384 kDa

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