

## Summary

Production Name	BRCA2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,ELISA
Reactivity	Human,Rat

#### Performance

Conjugation	Unconjugated	
Modification	Unmodified	
lsotype	IgG	
Clonality	Polyclonal	
Form	Liquid	
Storage	Store at $4^{\circ}$ C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw	
	cycles.	
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.	
Purification	Affinity purification	

#### Immunogen

Gene Name	BRCA2
Alternative Names	BRCA2; FACD; FANCD1; Breast cancer type 2 susceptibility protein; Fanconi anemia
	group D1 protein
Gene ID	675.0
SwissProt ID	P51587.The antiserum was produced against synthesized peptide derived from human
	BRCA2. AA range:31-80

# Application

Dilution Ratio	IHC 1:100 - 1:300. ELISA: 1:20000

**Molecular Weight** 



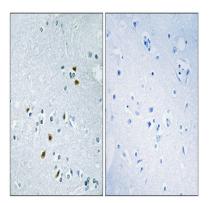
### Background

Inherited mutations in BRCA1 and this gene, BRCA2, confer increased lifetime risk of developing breast or ovarian cancer. Both BRCA1 and BRCA2 are involved in maintenance of genome stability, specifically the homologous recombination pathway for double-strand DNA repair. The BRCA2 protein contains several copies of a 70 aa motif called the BRC motif, and these motifs mediate binding to the RAD51 recombinase which functions in DNA repair. BRCA2 is considered a tumor suppressor gene, as tumors with BRCA2 mutations generally exhibit loss of heterozygosity (LOH) of the wild-type allele. [provided by RefSeq, Dec 2008], disease: Defects in BRCA2 are a cause of genetic susceptibility to breast cancer (BC) [MIM:612555, 114480]; also called susceptibility to familial breast-ovarian cancer type 2 (BROVCA2). BC is an extremely common malignancy, affecting one in eight women during their lifetime. A positive family history has been identified as major contributor to risk of development of the disease, and this link is striking for early-onset breast cancer. Mutations in BRCA2 are thought to be responsible for some inherited breast cancer. It is linked with male breast cancer., disease:Defects in BRCA2 are the cause of Fanconi anemia complementation group D type 1 (FANCD1) [MIM:605724]. Fanconi anemia [MIM:227650] is an autosomal recessive disorder affecting all bone marrow elements and associated with cardiac, renal, and limb malformations as well as dermal pigmentary changes., function: Involved in double-strand break repair and/or homologous recombination. May participate in S phase checkpoint activation.,online information:BRCA2 entry, polymorphism: Genetic variations in BRCA2 may underlie susceptibility to uveal melanoma [MIM:155720]. Uveal melanoma is the most common type of ocular malignant tumor, consisting of overgrowth of uveal melanocytes and often preceded by a uveal nevus., PTM: Phosphorylated by ATM upon irradiation-induced DNA damage., similarity: Contains 8 BRCA2 repeats., subunit: Interacts with RAD51 and DSS1. Interacts with ubiguitinated FANCD2. Interacts with PALB2, enables the recombinational repair and checkpoints functions. Interacts with WDR16, tissue specificity: Highest levels of expression in breast and thymus, with slightly lower levels in lung, ovary and spleen.,

#### **Research Area**

Homologous recombination;Pathways in cancer;Pancreatic cancer;

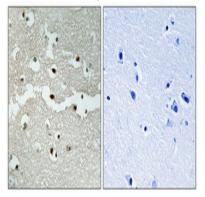
## Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using BRCA2 Antibody. The picture on the right is



#### blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4°,overnight) . Highpressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

#### Note

For research use only.