



## Rabbit Anti-XRCC3 antibody

SL4261R

<b>Product Name:</b>	XRCC3
<b>Chinese Name:</b>	X射线修复交叉互补蛋白3抗体
<b>Alias:</b>	DNA repair protein XRCC3; RAD51 like; X ray repair complementing defective repair in Chinese hamster; X ray repair complementing defective repair in Chinese hamster cells 3; X ray repair cross complementing protein 3; X-ray repair cross-complementing protein 3; XRCC 3; XRCC3; XRCC3_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Cow,Rabbit,Sheep,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	38kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human XRCC3:101-180/346
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA, thought to repair chromosomal fragmentation, translocations and deletions. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51 and RAD51C.

**Function:**

Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA, thought to repair chromosomal fragmentation, translocations and deletions. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51 and RAD51C.

**Subunit:**

Interacts with RAD51C and RAD51. Part of a complex consisting of RAD51B, RAD51C, RAD51D, XRCC2 and XRCC3. Forms a complex with FANCD2, BRCA2 and phosphorylated FANCG. Interacts with SWSAP1 and ZSWIM7; involved in homologous recombination repair.

**Subcellular Location:**

Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Mitochondrion. Note=Accumulates in discrete nuclear foci prior to DNA damage, and these foci persist throughout the time course of DNA repair.

**DISEASE:**

Defects in XRCC3 are the cause of susceptibility to breast cancer (BC) [MIM:114480]. BC is 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 XRCC3 are the cause of susceptibility to cutaneous malignant melanoma type 6 (CMM6) [MIM:613972]. CMM6 is a malignant neoplasm of melanocytes, arising de novo or from a pre-existing benign nevus, which occurs most often in the skin but also may involve other sites.

**Similarity:**

Belongs to the RecA family. RAD51 subfamily.

**SWISS:**

O43542

**Gene ID:**

7517

**Database links:**

[Entrez Gene: 7517](#) Human

[Entrez Gene: 74335](#) Mouse

[Entrez Gene: 100359601](#) Rat

[Omim: 600675](#) Human

[SwissProt: O43542](#) Human

[SwissProt: Q9CXE6](#) Mouse

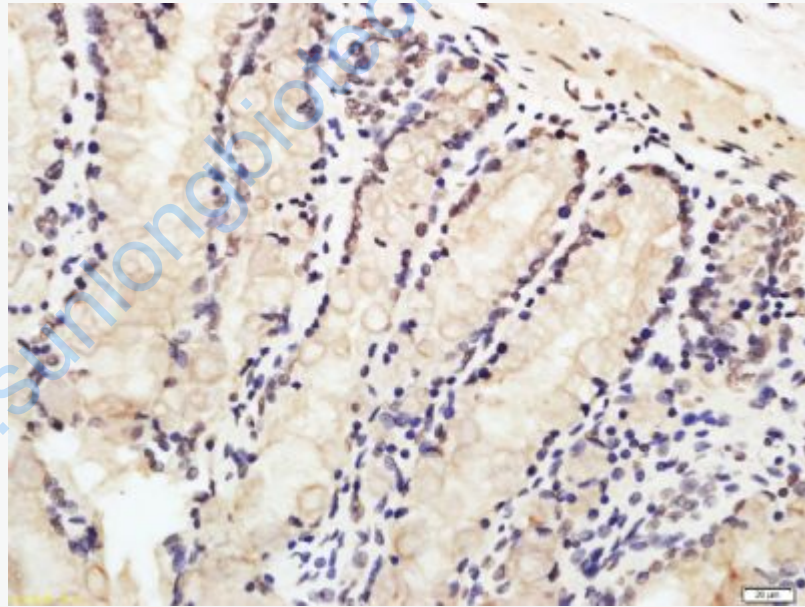
[Unigene: 592325](#) Human

[Unigene: 19082](#) Mouse

**Important Note:**

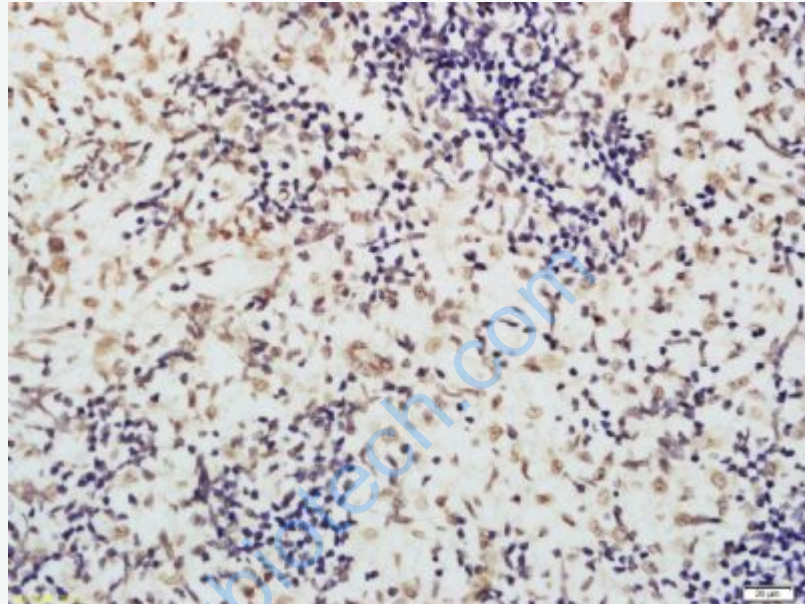
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Picture:**



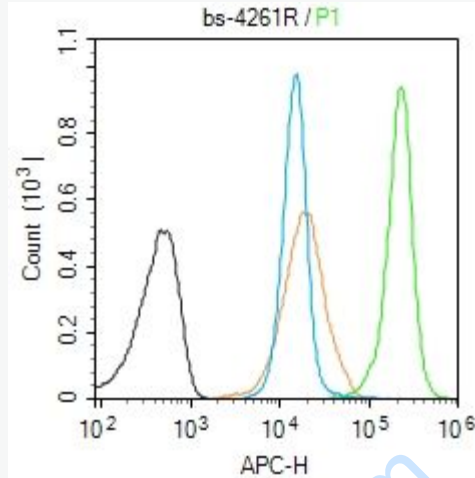
Tissue/cell: rat rectum tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-XRCC3 Polyclonal Antibody, Unconjugated(SL4261R) 1:100,

overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat spleen tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-XRCC3 Polyclonal Antibody, Unconjugated(SL4261R) 1:100, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (Black line): Molt4 (Black).

Primary Antibody (green line): Rabbit Anti-XRCC3 antibody (SL4261R)

Dilution:  $1\mu\text{g} / 10^6$  cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution:  $1\mu\text{g} / \text{test}$ .

Protocol

The cells were fixed with 4% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.