

**XRCC1 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5545C**

**Specification**

**XRCC1 Antibody (Center) - Product Information**

Application	IF, WB, IHC-P, FC,E
Primary Accession	<a href="#">P18887</a>
Other Accession	<a href="#">NP_006288.2</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	69477
Antigen Region	407-435

**XRCC1 Antibody (Center) - Additional Information**

**Gene ID** 7515

**Other Names**

DNA repair protein XRCC1, X-ray repair cross-complementing protein 1, XRCC1

**Target/Specificity**

This XRCC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 407-435 amino acids from the Central region of human XRCC1.

**Dilution**

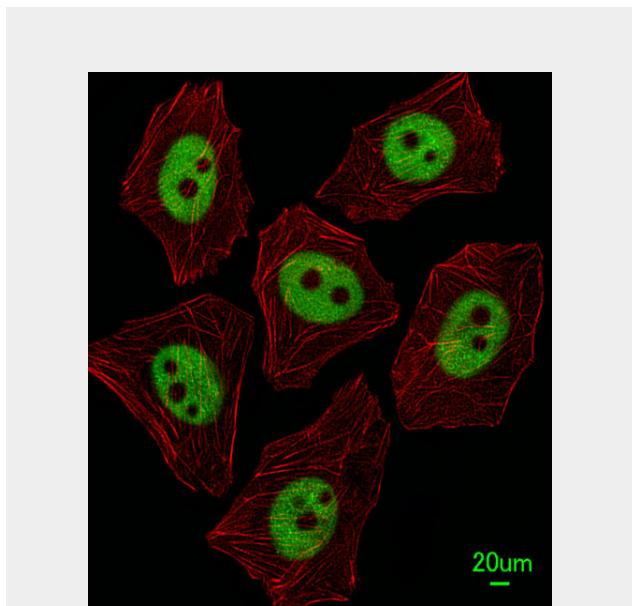
IF~~1:25  
 WB~~1:1000  
 IHC-P~~1:50~100  
 FC~~1:10~50

**Format**

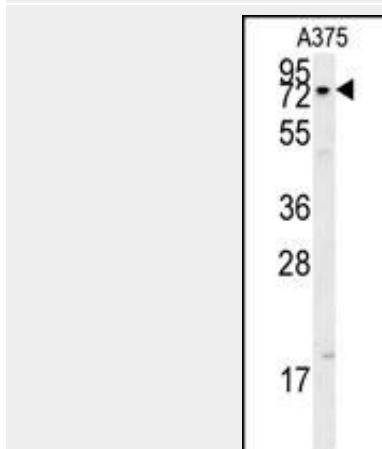
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



Immunofluorescent analysis of A549 cells, using XRCC1 Antibody (Center) (Cat. #AP5545c). AP5545c was diluted at 1:25 dilution. Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Dylight Fluor® 554 (red) conjugated Phalloidin (red).



XRCC1 Antibody (Center) (Cat. #AP5545c) western blot analysis in A375 cell line lysates (15ug/lane). This demonstrates the XRCC1 antibody detected the XRCC1 protein (arrow).

## Precautions

XRCC1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## XRCC1 Antibody (Center) - Protein Information

**Name** XRCC1

### Function

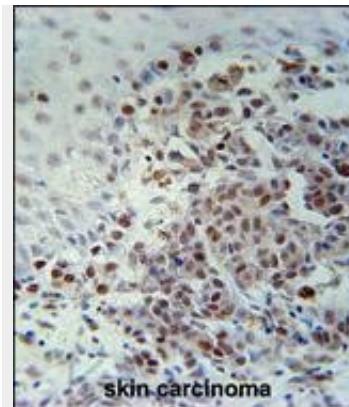
Involved in DNA single-strand break repair by mediating the assembly of DNA break repair protein complexes. Probably during DNA repair, negatively regulates ADP-ribose levels by modulating ADP-ribosyltransferase PARP1 activity.

### Cellular Location

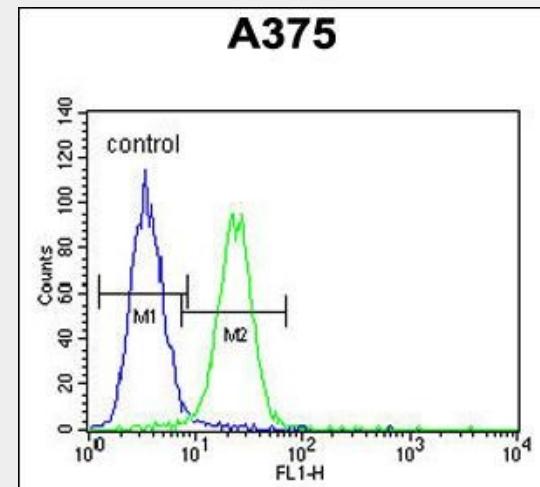
Nucleus. Note=Moves from the nucleoli to the global nuclear chromatin upon DNA damage

### Tissue Location

Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid cells (at protein level)



XRCC1 Antibody (Center) (Cat. #AP5545c) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the XRCC1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



XRCC1 Antibody (Center) (Cat. #AP5545c) flow cytometric analysis of A375 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## XRCC1 Antibody (Center) - Background

The protein encoded by this gene is involved in the efficient repair of DNA single-strand breaks formed by exposure to ionizing radiation and alkylating agents. This protein interacts with DNA ligase III, polymerase beta and poly

(ADP-ribose) polymerase to participate in the base excision repair pathway. It may play a role in DNA processing during meiogenesis and recombination in germ cells. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity.

#### **XRCC1 Antibody (Center) - References**

Lamerdin, J.E., et al. Genomics 25(2):547-554(1995)  
Gyapay, G., et al. Nat. Genet. 7 (2 SPEC NO), 246-339 (1994) :  
Thompson, L.H., et al. Mol. Cell. Biol. 10(12):6160-6171(1990)  
Thompson, L.H., et al. Genomics 5(4):670-679(1989)