

XRCC1 Antibody

Rabbit mAb Catalog # AP91250

## Specification

# XRCC1 Antibody - Product Information

ApplicationWB, IHC, ICCPrimary AccessionP18887ReactivityRatClonalityMonoclonalOther NamesDNA repair protein XRCC1; RCC; X ray repair complementing defective repair in chinese hamster;<br/>XRCC 1;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	69477 Da

### XRCC1 Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human XRCC1
Description	XRCC1 acts as a scaffold protein to coordinate DNA abasic site repair through interaction with several other repair proteins. At least eight XRCC1 protein partners have been identified, including the polynucleotide kinase PNK, DNA ligase III, poly (ADP-ribose) polymerase, and PCNA.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### XRCC1 Antibody - Protein Information

Name XRCC1 {ECO:0000303|PubMed:2247054, ECO:0000312|HGNC:HGNC:12828}

#### Function

Scaffold protein involved in DNA single-strand break repair by mediating the assembly of DNA break repair protein complexes (PubMed:<a href="http://www.uniprot.org/citations/11163244" target="\_blank">11163244</a>, PubMed:<a href="http://www.uniprot.org/citations/28002403" target="\_blank">28002403</a>). Negatively regulates ADP- ribosyltransferase activity of PARP1



during base-excision repair in order to prevent excessive PARP1 activity (PubMed:<a href="http://www.uniprot.org/citations/28002403" target="\_blank">28002403</a>, PubMed:<a href="http://www.uniprot.org/citations/34102106" target="\_blank">34102106</a>, PubMed:<a href="http://www.uniprot.org/citations/34811483" target="\_blank">34811483</a>). Recognizes and binds poly-ADP-ribose chains: specifically binds auto-poly-ADP-ribosylated PARP1, limiting its activity (PubMed:<a href="http://www.uniprot.org/citations/14500814"

target="\_blank">14500814</a>, PubMed:<a href="http://www.uniprot.org/citations/34102106" target="\_blank">34102106</a>, PubMed:<a href="http://www.uniprot.org/citations/34811483" target="\_blank">34811483</a>).

#### **Cellular Location**

Nucleus. Chromosome Note=Moves from the nucleoli to the global nuclear chromatin upon DNA damage (PubMed:28002403). Recruited to DNA damage sites fowwing interaction with poly-ADP-ribose chains (PubMed:14500814)

Tissue Location

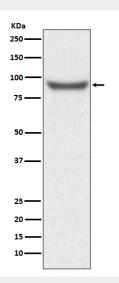
Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid cells (at protein level)

#### XRCC1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### XRCC1 Antibody - Images



Western blot analysis of XRCC1 expression in HeLa cell lysate.