

## **XRCC1 Antibody**

Rabbit mAb Catalog # AP91250

# **Specification**

## **XRCC1 Antibody - Product Information**

Application WB, IHC, ICC

Primary Accession P18887
Reactivity Rat

Clonality Monoclonal

**Other Names** 

DNA repair protein XRCC1; RCC; X ray repair complementing defective repair in chinese hamster;

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 Affinity-chromatography

Immunogen 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



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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**

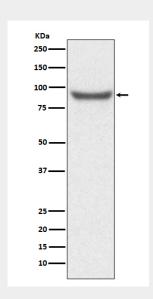
Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid cells (at protein level)

### **XRCC1 Antibody - Protocols**

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

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

## **XRCC1 Antibody - Images**



Western blot analysis of XRCC1 expression in HeLa cell lysate.