

# XRCC1 Polyclonal Antibody

Catalog # AP73100

## **Product Information**

Application	WB, IHC-P
Primary Accession	<u>P18887</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69498

#### **Additional Information**

Gene ID	7515
Other Names	XRCC1; DNA repair protein XRCC1; X-ray repair cross-complementing protein 1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

### **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: <u>11163244</u> , PubMed: <u>28002403</u> ). Negatively regulates ADP- ribosyltransferase activity of PARP1 during base-excision repair in order to prevent excessive PARP1 activity (PubMed: <u>28002403</u> , PubMed: <u>34102106</u> , PubMed: <u>34811483</u> ). Recognizes and binds poly-ADP-ribose chains: specifically binds auto-poly-ADP-ribosylated PARP1, limiting its activity (PubMed: <u>14500814</u> , PubMed: <u>34102106</u> , PubMed: <u>34811483</u> ).
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)

# Background

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.

#### Images



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