

XRCC1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51615

Product Information

Application	WB, IHC-P
Primary Accession	P18887
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69498

Additional Information

Gene ID	7515
Other Names	DNA repair protein XRCC1, X-ray repair cross-complementing protein 1, XRCC1
Dilution	WB~~1:1000 IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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: 11163244 , PubMed: 28002403). Negatively regulates ADP- ribosyltransferase activity of PARP1 during base-excision repair in order to prevent excessive PARP1 activity (PubMed: 28002403 , PubMed: 34102106 , PubMed: 34811483). Recognizes and binds poly-ADP-ribose chains: specifically binds auto-poly-ADP-ribosylated PARP1, limiting its activity (PubMed: 14500814 , PubMed: 34102106 , PubMed: 34811483).
Cellular Location	Nucleus. Chromosome Note=Moves from the nucleoli to the global nuclear chromatin upon DNA damage (PubMed:28002403). Recruited to DNA damage sites following interaction with poly-ADP-ribose chains (PubMed:14500814)
Tissue Location	Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid cells (at protein level)

Background

Corrects defective DNA strand-break repair and sister chromatid exchange following treatment with ionizing radiation and alkylating agents.

References

Thompson L.H.,et al.Mol. Cell. Biol. 10:6160-6171(1990).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Grimwood J.,et al.Nature 428:529-535(2004).
Whitehouse C.J.,et al.Cell 104:107-117(2001).
Sano Y.,et al.Ann. Neurol. 55:241-249(2004).

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