

XRCC1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52839

Specification

XRCC1 Antibody - Product Information

Application	WB
Primary Accession	P18887
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	82 KDa

XRCC1 Antibody - Additional Information

Gene ID 7515

Other Names

DNA repair protein XRCC1;RCC;X ray repair complementing defective repair in chinese hamster;X ray repair complementing defective repair in chinese hamster cells 1;X ray Repair Complementing Defective Repair in Chinese Hamster Cells;X ray repair cross complementing protein 1;X ray repair, complementing defective, repair in Chinese hamster;X-ray repair cross-complementing protein 1;XRCC 1;Xrcc1;XRCC1_HUMAN.

Dilution

WB~~1:1000

Format

Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

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: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](http://www.uniprot.org/citations/14500814)), PubMed:[34102106](http://www.uniprot.org/citations/34102106)), PubMed:[34811483](http://www.uniprot.org/citations/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

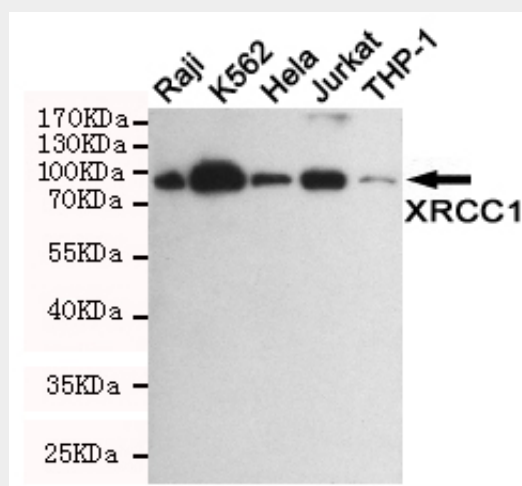
Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid cells (at protein level)

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 Cytometry](#)
- [Cell Culture](#)

XRCC1 Antibody - Images



Western blot detection of XRCC1 in Raji, K562, HeLa, Jurkat and THP-1 cell lysates using XRCC1 mouse mAb (1:1000 diluted). Predicted band size: 82KDa. Observed band size: 82KDa.

XRCC1 Antibody - Background

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

XRCC1 Antibody - 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).