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XRCC1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52839

Product Information

Application	WB
Primary Accession	P18887
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	69498

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	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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 fowwing interaction with poly-ADP-ribose chains (PubMed:14500814)
Tissue Location	Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid cells (at protein level)

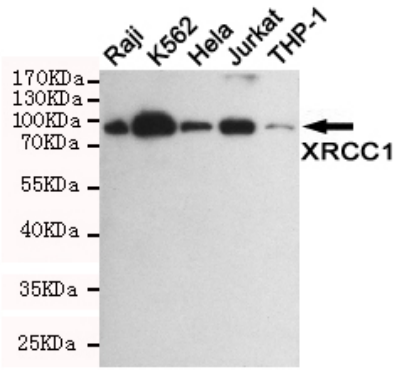
Background

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).

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.