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XRCC1 Antibody

Rabbit mAb
Catalog # AP91250

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	P18887
Reactivity	Rat, Human, Mouse
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	69498

Additional Information

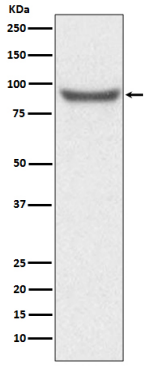
Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human XRCC1
Description	XRCC1 acts as a scaffold protein to coordinate DNA abasic site repair through interaction with several other repair proteins. At least eight 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.

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)

Images



Western blot analysis of XRCC1 expression in HeLa cell lysate.

Image not found : 202311/AP91250-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human testis, using XRCC1 Antibody.

Image not found : 202311/AP91250-IF.jpg

Immunofluorescent analysis of Hela cells, using XRCC1 Antibody .