

XRCC1 Polyclonal Antibody

Catalog No: YT4917

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: XRCC1

Fields: >>Base excision repair

Gene Name: XRCC1

Protein Name: DNA repair protein XRCC1

Human Gene Id: 7515

Human Swiss Prot

P18887

No:

Mouse Gene ld: 22594

Mouse Swiss Prot

Q60596

No:

Rat Gene Id: 84495

Rat Swiss Prot No: Q9ESZ0

Immunogen: The antiserum was produced against synthesized peptide derived from human

XRCC1. AA range:517-566

Specificity: XRCC1 Polyclonal Antibody detects endogenous levels of XRCC1 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 70kD

Cell Pathway: Base excision repair;

Background: The protein encoded by this gene is involved in the efficient repair of DNA single-

strand breaks formed by exposure to ionizing radiation and alkylating agents. This protein interacts with DNA ligase III, polymerase beta and poly (ADP-ribose) polymerase to participate in the base excision repair pathway. It may play a role in DNA processing during meiogenesis and recombination in germ cells. A rare microsatellite polymorphism in this gene is associated with cancer in patients of

varying radiosensitivity. [provided by RefSeq, Jul 2008],

Function: function:Corrects defective DNA strand-break repair and sister chromatid

exchange following treatment with ionizing radiation and alkylating

agents.,polymorphism:Carriers of the polymorphic Gln-399 allele may be at greater risk for tobacco- and age-related DNA damage.,PTM:Phosphorylation of Ser-371 causes dimer dissociation. Phosphorylation by CK2 promotes interaction

with APTX and APLF.,PTM:Sumoylated.,similarity:Contains 2 BRCT

domains., subcellular location: Accumulates at sites of DNA

damage.,subunit:Homodimer. Interacts with polynucleotide kinase (PNK), DNA polymerase-beta (POLB) and DNA ligase III (LIG3). Interacts with APTX and

APLF.,

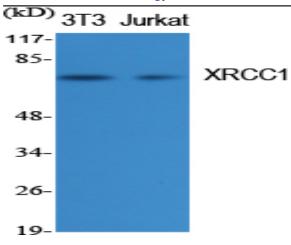
Subcellular Nucleus . Moves from the nucleoli to the global nuclear chromatin upon DNA

Location: damage. .

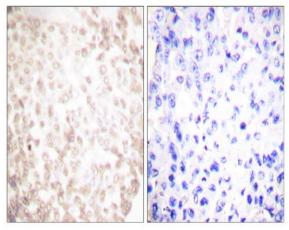
Expression: Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid

cells (at protein level).

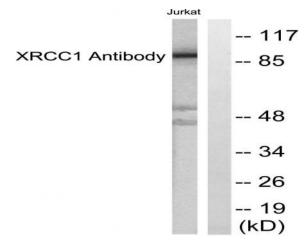
Products Images



Western Blot analysis of various cells using XRCC1 Polyclonal Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using XRCC1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using XRCC1 Antibody. The lane on the right is blocked with the synthesized peptide.