

Rabbit XRCC3 Polyclonal Antibody | anti-XRCC3 antibody

XRCC3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326616	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

XRCC3; Polyclonal Antibody; XRCC3 Antibody; CMM6; DNA repair protein XRCC3; RAD51 like; X ray repair complementing defective repair in Chinese hamster; X ray repair complementing defective repair in Chinese hamster cells 3; X ray repair cross complementing protein 3; X-ray repair cross-complementing protein 3; XRCC 3; XRCC3_HUMAN; anti-XRCC3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	XRCC3 antibody detects endogenous levels of total XRCC3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	346
Applicable Applications for anti-XRCC3 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human XRCC3
Subcellular Location	Nucleus. Cytoplasm. Cytoplasm > Perinuclear Region. Mitochondrion. Accumulates in discrete nuclear foci prior to DNA damage, and these foci persist throughout the time course of DNA repair.
Tissue Specificity	Stress-induced increase in the mitochondrial levels is seen.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of HepG2 whole cell lysates, using XRCC3 Antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA326616 staining HepG2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



IHC (Immunohistochemistry)

AAA326616 at 1/100 staining Rat lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-XRCC3 antibody	Description: This gene encodes a member of the RecA/Rad51-related protein family that participates in homologous recombination to maintain chromosome stability and repair DNA damage. This gene functionally complements Chinese hamster irs1SF, a repair-deficient mutant that exhibits hypersensitivity to a number of different DNA-damaging agents and is chromosomally unstable. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity. Alternatively spliced transcript variants encoding the same protein have been identified. [provided by RefSeq, Jul 2008] Function: Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA, thought to repair chromosomal fragmentation, translocations and deletions. Part of the RAD21 paralog protein complex CX3 which acts in the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, CX3 acts downstream of RAD51 recruitment; the complex binds predominantly to the intersection of the four duplex arms of the Holliday junction (HJ) and to junctions of replication forks. Involved in HJ resolution and thus in processing HR intermediates late in the DNA repair process; the function may be linked to the CX3 complex and seems to involve GEN1 during mitotic cell cycle progression. Part of a PALB2-scaffolded HR complex containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51 and RAD51C. Subunit Structure: Interacts with RAD51C and RAD51. Part of the CX3 complex consisting of RAD51C and XRCC3; the complex has a ring-like structure arranged into a flat disc around a central channel; CX3 can interact with RAD51 in vitro. Forms a complex with FANCD2, BRCA2 and phosphorylated FANCG. Interacts with SWSAP1 and ZSWIM7; involved in homologous recombination repair. Interacts directly with PALB2 which may serve as a scaffold for a HR complex containing PALB2, BRCA2, RAD51C, RAD51 and XRCC3. Similarity: Belongs to the RecA family. RAD51 subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	153946427
NCBI GeneID	7517
NCBI Accession #	NP_001093588.1
NCBI GenBank Nucleotide #	NM_001100118.1
UniProt Accession #	O43542; O43568; Q9BU18
Molecular Weight	Observed: 38 kDa Predicted: 38 kDa
NCBI Official Full Name	DNA repair protein XRCC3
NCBI Official Synonym Full Names	X-ray repair cross complementing 3
NCBI Official Symbol	XRCC3
NCBI Official Synonym Symbols	CMM6
NCBI Protein Information	DNA repair protein XRCC3
UniProt Protein Name	DNA repair protein XRCC3
UniProt Gene Name	XRCC3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/xrcc3-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326616>