

Rabbit XRCC1 Polyclonal Antibody | anti-XRCC1 antibody

Phospho-XRCC1 (Thr284) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329957	Rabbit	Human Predicted Reactivity: Horse (83%), Sheep (80%), Rabbit (83%), Dog (100%)	ELISA, Immunohistochemistry, Western Blot

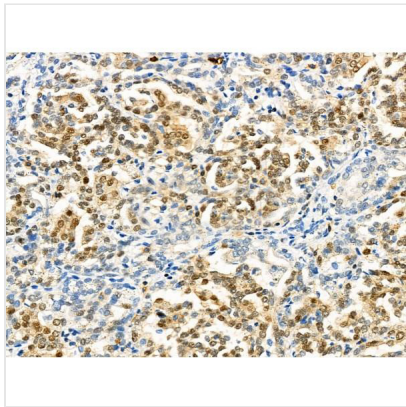
PRODUCT SYNONYMS

XRCC1; Polyclonal Antibody; Phospho-XRCC1 (Thr284) Antibody; DNA repair protein XRCC1; RCC; X ray repair complementing defective repair in chinese hamster; X ray Repair Complementing Defective Repair in Chinese Hamster Cells; X ray repair complementing defective repair in chinese hamster cells 1; X ray repair cross complementing 1; 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; anti-XRCC1 antibody

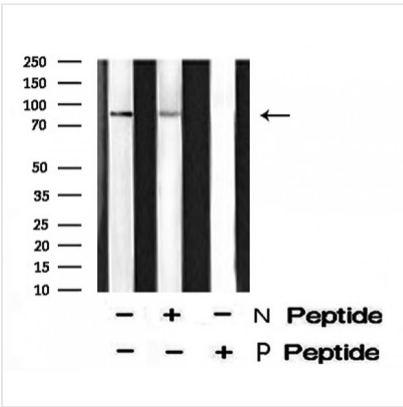
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human Predicted Reactivity: Horse (83%), Sheep (80%), Rabbit (83%), Dog (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-XRCC1 (Thr284) Antibody detects endogenous levels of XRCC1 only when phosphorylated at Thr284. Tissue Specificity: Expressed in fibroblasts, retinal pigmented epithelial cells and lymphoblastoid cells (at protein level).
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-XRCC1 antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human XRCC1 around the phosphorylation site of Thr284.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Phosphorylation of Ser-371 causes dimer dissociation. Phosphorylation by CK2 promotes interaction with APTX and APLF. Sumoylated.
Subunit Structure	Homodimer. Interacts with polynucleotide kinase (PNK), DNA polymerase-beta (POLB) and DNA ligase III (LIG3). Interacts with APTX and APLF. Interacts with APEX1; the interaction is induced by SIRT1 and increases with the acetylated form of APEX1.
Subcellular Location	Nucleus. Note: Moves from the nucleoli to the global nuclear chromatin upon DNA damage.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
Staining Human kidney cancer 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of XRCC1 (Phospho-Thr284) using HeLa whole cell lysates. -/+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-XRCC1 antibody	Involved in DNA single-strand break repair by mediating the assembly of DNA break repair protein complexes. Probably during DNA repair, negatively regulates ADP-ribose levels by modulating ADP-ribosyltransferase PARP1 activity.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	190684675
NCBI GeneID	7515
NCBI Accession #	NP_006288.2
NCBI GenBank Nucleotide #	NM_006297.2
UniProt Accession #	P18887; Q6IBS4; Q9HCB1
Molecular Weight	69,477 Da
NCBI Official Full Name	DNA repair protein XRCC1
NCBI Official Synonym Full Names	X-ray repair complementing defective repair in Chinese hamster cells 1
NCBI Official Symbol	XRCC1
NCBI Official Synonym Symbols	RCC
NCBI Protein Information	DNA repair protein XRCC1; X-ray repair cross-complementing protein 1; X-ray-repair, complementing defective, repair in Chinese hamster
UniProt Protein Name	DNA repair protein XRCC1
UniProt Gene Name	XRCC1
UniProt Entry Name	XRCC1_HUMAN

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.