

Rabbit XRCC4 Polyclonal Antibody | anti-XRCC4 antibody

XRCC4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326316	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

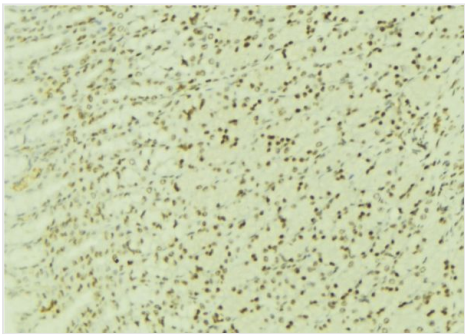
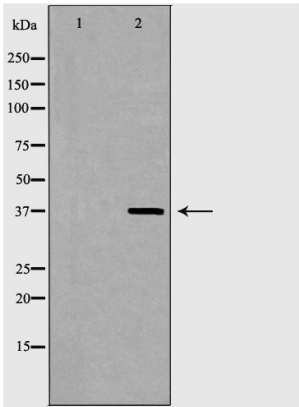
PRODUCT SYNONYMS

XRCC4; Polyclonal Antibody; XRCC4 Antibody; DNA double strand break repair and V(D)J recombination protein XRCC4; DNA repair protein XRCC4; SSMED; X ray repair complementing defective repair in Chinese hamster cells 4; X ray repair cross complementing 4; X ray repair cross complementing protein 4; X-ray repair cross-complementing protein 4; XRCC 4; XRCC4_HUMAN; anti-XRCC4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	XRCC4 antibody detects endogenous levels of total XRCC4
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	336
Applicable Applications for anti-XRCC4 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human XRCC4
Subcellular Location	Nucleus.
Tissue Specificity	Widely expressed.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326316 at 1/100 staining Human gastric 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.

WB (Western Blot)
Western blot analysis of extracts of HEK293T, using XRCC4 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-XRCC4 antibody

Description: The protein encoded by this gene functions together with DNA ligase IV and the DNA-dependent protein kinase in the repair of DNA double-strand break by non-homologous end joining and the completion of V(D)J recombination events. The non-homologous end-joining pathway is required both for normal development and for suppression of tumors. This gene functionally complements XR-1 Chinese hamster ovary cell mutant, which is impaired in DNA double-strand breaks produced by ionizing radiation and restriction enzymes. Alternative transcription initiation and alternative splicing generates several transcript variants. [provided by RefSeq, Sep 2008]
Function: Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. Binds to DNA and to DNA ligase IV (LIG4). The LIG4-XRCC4 complex is responsible for the NHEJ ligation step, and XRCC4 enhances the joining activity of LIG4. Binding of the LIG4-XRCC4 complex to DNA ends is dependent on the assembly of the DNA-dependent protein kinase complex DNA-PK to these DNA ends.
Subunit Structure: Homodimer and homotetramer in solution. The homodimer associates with LIG4. The LIG4-XRCC4 complex associates in a DNA-dependent manner with the DNA-PK complex composed of PRKDC, XRCC6/Ku70 and XRCC5/Ku86 to form the core non-homologous end joining (NHEJ) complex. Additional components of the NHEJ complex include NHEJ1/XLF and PAXX. Interacts directly with PRKDC but not with the XRCC6/Ku70 and XRCC5/Ku86 dimer. Interacts with APTX and APLF.
Post-translational Modifications: Phosphorylated by PRKDC. The phosphorylation seems not to be necessary for binding to DNA. Phosphorylation by CK2 promotes interaction with APTX. Monoubiquitinated. Sumoylation at Lys-210 is required for nuclear localization and recombination efficiency. Has no effect on ubiquitination.
Similarity: Belongs to the XRCC4 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	966751406
NCBI GeneID	7518
NCBI Accession #	NP_001304941.1
NCBI GenBank Nucleotide #	NM_001318012.1
UniProt Accession #	Q13426; Q9BS72; Q9UP94; A8K3X4
Molecular Weight	Observed: 38 kDa Predicted: 39 kDa
NCBI Official Full Name	DNA repair protein XRCC4 isoform 2
NCBI Official Synonym Full Names	X-ray repair cross complementing 4
NCBI Official Symbol	XRCC4
NCBI Official Synonym Symbols	SSMED

NCBI Protein Information	DNA repair protein XRCC4
UniProt Protein Name	DNA repair protein XRCC4
UniProt Gene Name	XRCC4

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://www.aaabiotech.com/polyclonal/xrcc4-antibody-immunohistochemistry-western-blot-elisa/326316>