

XRCC5 recombinant antibody

XRCC5 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA243888	Rabbit	Human	Immunofluorescence, Immunohistochemistry, Western Blot, ELISA

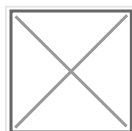
PRODUCT SYNONYMS

XRCC5; Monoclonal Recombinant Antibody; XRCC5 Antibody; X-ray repair cross-complementing protein 5 (EC 3.6.4.-) (86 kDa subunit of Ku antigen) (ATP-dependent DNA helicase 2 subunit 2) (ATP-dependent DNA helicase II 80 kDa subunit) (CTC box-binding factor 85 kDa subunit) (CTC85) (CTCBF) (DNA repair protein XRCC5) (Ku80) (Ku86) (Lupus Ku autoantigen protein p86) (Nuclear factor IV) (Thyroid-lupus autoantigen) (TLAA) (X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining)); G22P2; XRCC5 recombinant antibody

PRODUCT SPECIFICATIONS

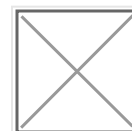
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	5G3
Purity/Purification	Affinity-chromatography
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, PH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Applicable Applications for XRCC5 recombinant antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot), ELISA
Antibody Type	Recombinant Antibody
Conjugation	Non-conjugated
Immunogen	A synthesized peptide derived from human Ku80
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



IF (Immunofluorescence)

Immunofluorescence staining of HeLa Cells at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4 degree C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG ?H+L?.



IHC (Immunohistochemistry)

IHC image diluted at 1:100 and staining in paraffin-embedded human lung cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC (Immunohistochemistry)

IHC image diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



WB (Western Blot)

Western BlotPositive WB detected in: K562 whole cell lysate, A549 whole cell lysate, 293T whole cell lysateAll lanes: XRCC5 antibody at 1:2000SecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 83 kDaObserved band size: 83 kDa

ADDITIONAL INFORMATION

Related Product Information for XRCC5 recombinant antibody

Single-stranded DNA-dependent ATP-dependent helicase. Has a role in chromosome translocation. The DNA helicase II complex binds preferentially to fork-like ends of double-stranded DNA in a cell cycle-dependent manner. It works in the 3'-5' direction. Binding to DNA may be mediated by XRCC6. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The XRCC5/6 dimer acts as regulatory subunit of the DNA-dependent protein kinase complex DNA-PK by increasing the affinity of the catalytic subunit PRKDC to DNA by 100-fold. The XRCC5/6 dimer is probably involved in stabilizing broken DNA ends and bringing them together (PubMed:12145306, PubMed:20383123, PubMed:7957065, PubMed:8621488). The assembly of the DNA-PK complex to DNA ends is required for the NHEJ ligation step. In association with NAA15, the XRCC5/6 dimer binds to the osteocalcin promoter and activates osteocalcin expression (PubMed:20383123). The XRCC5/6 dimer probably also acts as a 5'-deoxyribose-5-phosphate lyase (5'-dRP lyase), by catalyzing the beta-elimination of the 5' deoxyribose-5-phosphate at an abasic site near double-strand breaks. XRCC5 probably acts as the catalytic subunit of 5'-dRP activity, and allows to 'clean' the termini of abasic sites, a class of nucleotide damage commonly associated with strand breaks, before such broken ends can be joined. The XRCC5/6 dimer together with APEX1 acts as a negative regulator of transcription (PubMed:8621488).

Product Categories/Family for XRCC5 recombinant antibody

[Epigenetics and Nuclear Signaling](#)

NCBI AND UNIPROT INFORMATION

NCBI GI #	10863945
NCBI GeneID	7520
NCBI Accession #	NP_066964.1
NCBI GenBank Nucleotide #	NM_021141.3
UniProt Accession #	P13010; Q0Z7V0; Q4VBQ5; Q53HH7; Q7M4N0; Q9UCQ0; Q9UCQ1; A8K3X5
Molecular Weight	82,705 Da
NCBI Official Full Name	X-ray repair cross-complementing protein 5
NCBI Official Synonym Full Names	X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break rejoining)
NCBI Official Symbol	XRCC5
NCBI Official Synonym Symbols	KU80; KUB2; Ku86; NFIV; KARP1; KARP-1
NCBI Protein Information	X-ray repair cross-complementing protein 5; TLAA; CTC85; CTCBF; nuclear factor IV; Ku autoantigen, 80kDa; DNA repair protein XRCC5; thyroid-lupus autoantigen; 86 kDa subunit of Ku antigen; lupus Ku autoantigen protein p86; Ku86 autoantigen related protein
UniProt Protein Name	X-ray repair cross-complementing protein 5
UniProt Gene Name	XRCC5
UniProt Synonym Gene Names	G22P2; CTC85; CTCBF; TLAA
UniProt Entry Name	XRCC5_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.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/xrcc5-recombinant-antibody-clone-5g3-immunofluorescence-immunohistochemistry-western-blot-elisa/243888>