

Rabbit anti-Human, Mouse XRCC5 Polyclonal Antibody | anti-XRCC5 antibody

XRCC5 Antibody

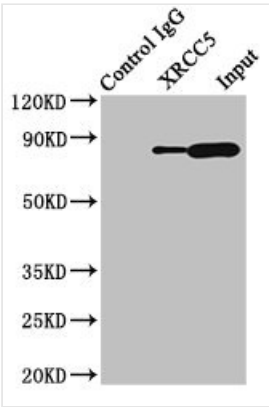
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA232729	Rabbit	Human, Mouse	Immunohistochemistry, Western Blot, ELISA

PRODUCT SYNONYMS

XRCC5; Polyclonal Antibody; XRCC5 Antibody; X-ray repair cross-complementing protein 5; 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; anti-XRCC5 antibody

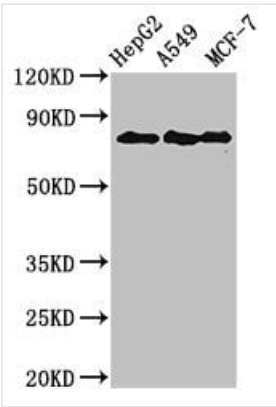
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	>95%, Protein G purified
Form/Format	Liquid
Sequence Length	732
Applicable Applications for anti-XRCC5 antibody	IHC (Immunohistochemistry), WB (Western Blot), ELISA
Immunogen	Recombinant Human X-ray repair cross-complementing protein 5 protein (251-455AA)
Preservative	0.03% Proclin 300
Constituents	50% Glycerol, 0.01M PBS, pH 7.4
Conjugation	Non-conjugated
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-1484 / sc-1485 / sc-9034
Preparation and Storage	Shipped at 4 degree C. Upon delivery aliquot and store at -20 degree C or -80 degree C. Avoid repeated freeze.



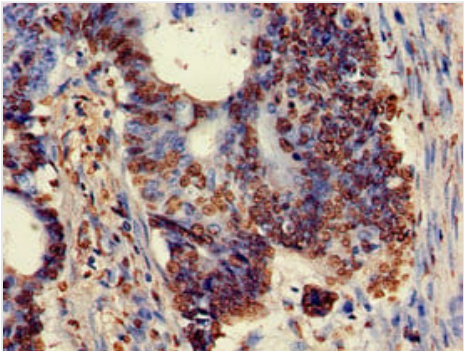
IP (Immunoprecipitation)

Immunoprecipitating XRCC5 in HepG2 whole cell lysateLane 1: Rabbit control IgG (1ug)instead of AAA232729 in HepG2 whole cell lysate. For western blotting,a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)Lane 2: AAA232729 (8ug)+ HepG2 whole cell lysate (500ug)Lane 3: HepG2 whole cell lysate (10ug)



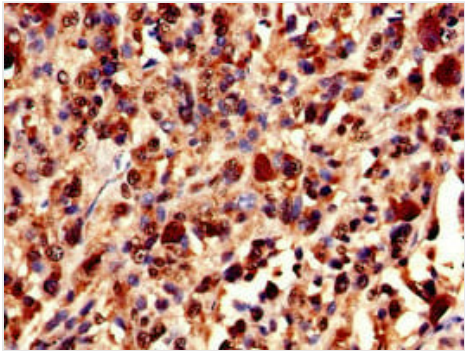
WB (Western Blot)

Western BlotPositive WB detected in: HepG2 whole cell lysate,A549 whole cell lysate,MCF-7 whole cell lysateAll lanes: XRCC5 antibody at 2.5ug/mlSecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 83 KDaObserved band size: 83 KDa



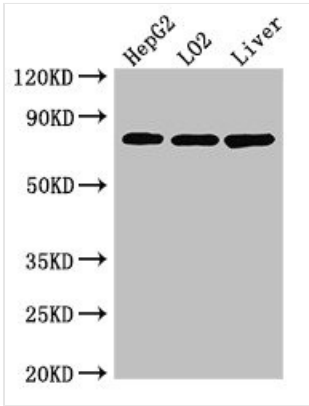
IHC (Immunohistochemisry)

Immunohistochemistry of paraffin-embedded human colon cancer using AAA232729 at dilution of 1:100



IHC (Immunohiostchemistry)

Immunohistochemistry of paraffin-embedded human melanoma cancer using AAA232729 at dilution of 1:100



WB (Western Blot)

Western BlotPositive WB detected in: HepG2 whole cell lysate,LO2 whole cell lysate,Mouse liver tissueAll lanes: XRCC5 antibody at 3.5ug/mlSecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 83 KDaObserved band size: 83 KDa

ADDITIONAL INFORMATION

Related Product Information for anti-XRCC5 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).
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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 cross complementing 5
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
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.