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anti-XRCC5 antibody (C-Term)

2 Images



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Overview

Quantity:	100 μL
Target:	XRCC5
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This XRCC5 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	Synthesized peptide derived from C-terminal of Human XRCC5.
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Target Details

Target:	XRCC5
Alternative Name:	XRCC5 (XRCC5 Products)
Background:	Background: 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. 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. 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.

Ming-Ni Lee, Clin. Cancer Res., Feb 2007, 13: 832 - 838.

PA Jeggo, PNAS, Jul 1992, 89: 6423.

Patrick Hayden, Blood (ASH Annual Meeting Abstracts), Nov 2006, 108: 3416.

Aliases: 86 kDa subunit of Ku antigen antibody, ATP dependent DNA helicase 2 subunit 2 antibody, ATP dependent DNA helicase II 80 kDa subunit antibody, ATP dependent DNA helicase II 86 Kd subunit antibody, ATP dependent DNA helicase II antibody, ATP-dependent DNA helicase 2 subunit 2 antibody, ATP-dependent DNA helicase II 80 kDa subunit antibody, CTC box binding factor 85 kDa antibody, CTC box-binding factor 85 kDa subunit antibody, CTC85 antibody, CTC85 antibody, CTC8F antibody, DNA repair protein XRCC5 antibody, KaRP 1 antibody, KaRP1 antibody, Ku 80 antibody, Ku autoantigen 80 kDa antibody, Ku80 antibody, Ku86 antibody, Ku86 autoantigen related protein 1 antibody, KUB 2 antibody, KUB2 antibody, Lupus Ku autoantigen protein p86 antibody, NFIV antibody, Nuclear factor IV antibody, Thyroid lupus autoantigen antibody, Thyroid-lupus autoantigen antibody, TLAA antibody, X ray repair complementing defective repair in Chinese hamster cells 5 (double strand break rejoining) antibody, X-ray repair cross-complementing protein 5 antibody, Xray repair complementing defective repair in Chinese hamster cells 5 antibody, XRCC5 antibody, XRCC5 antibody, XRCC5 antibody, XRCC5 antibody

UniProt: P13010

Target Details

Pathways:	DNA Damage Repair
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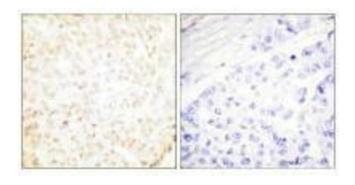
Application Details

Application Notes:	WB:1:500-1:3000, IHC:1:50-1:100,
Restrictions:	For Research Use only

Handling

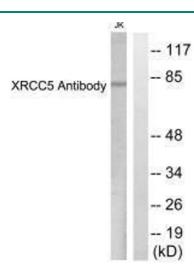
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. Immunohistochemistry analysis of paraffinembedded human breast carcinoma tissue using XRCC5 antibody.



Western Blotting

Image 2. Western blot analysis of extracts from Jurkat cells, using XRCC5 antibody.