Datasheet for ABIN7180288

anti-XRCC6 antibody (C-Term)

2 Images

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Overview

Quantity:	100 µL
Target:	XRCC6
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This XRCC6 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Synthesized peptide derived from C-terminal of Human XRCC6.
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:	XRCC6
Alternative Name:	XRCC6 (XRCC6 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. Required for osteocalcin gene expression. 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. 5'-dRP lyase activity 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. Yanhong Liu, Carcinogenesis, Mar 2007, 10.1093. Erich M. Sturgis, Arch Otolaryngol Head Neck Surg, Feb 1999, 125: 185. Yansong Gu, PNAS, Jul 1997, 94: 8076. Kyoung-Mu Lee, Clin. Cancer Res., Jun 2005, 11: 4620 - 4626. Aliases: 5''-deoxyribose-5-phosphate lyase Ku70 antibody, 5''-dRP lyase Ku70 antibody, 70 kDa subunit of Ku antigen antibody, ATP dependent DNA helicase 2 subunit 1 antibody, ATP dependent DNA helicase II 70 kDa subunit antibody, ATP-dependent DNA helicase 2 subunit 1 antibody, ATP-dependent DNA helicase II 70 kDa subunit antibody, CTC box binding factor 75 kDa subunit antibody, CTC box-binding factor 75 kDa subunit antibody, CTC75 antibody, CTCBF antibody, DNA repair protein XRCC6 antibody, G22P1 antibody, Ku 70 antibody, Ku autoantigen p70 subunit antibody, Ku autoantigen, 70 kDa antibody, Ku p70 antibody, Ku70 antibody, Ku70 DNA binding component of DNA-dependent proteinkinase complex (thyroid autoantigen 70 kDa antibody, Kup70 antibody, Lupus Ku autoantigen protein p70 antibody, ML8 antibody, Thyroid autoantigen 70kD (Ku antigen) antibody, Thyroid autoantigen antibody, Thyroid lupus autoantigen antibody, Thyroid lupus autoantigen p70 antibody, Thyroid-lupus autoantigen antibody, TLAA antibody, X ray repair complementing defective repair in Chinese hamster cells 6 antibody, X-ray repair complementing defective repair in Chinese hamster cells 6 antibody, X-ray repair cross-complementing protein 6 antibody, XRCC 6 antibody, Xrcc6 antibody, XRCC6_HUMAN antibody
UniProt:	P12956
Pathways:	DNA Damage Repair

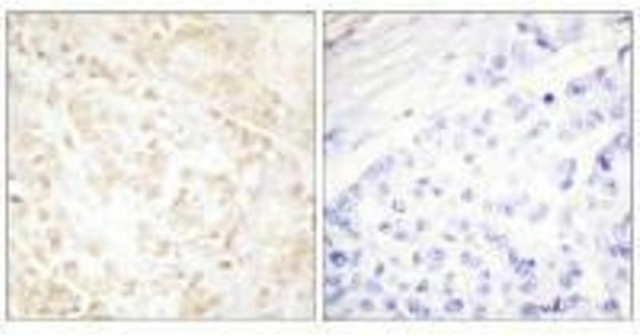
Application Details

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

Handling

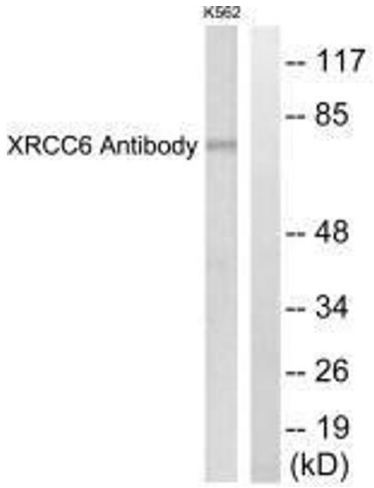
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained 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 paraffin-embedded human breast carcinoma tissue using XRCC6 antibody.



Western Blotting

Image 2. Western blot analysis of extracts from K562 cells, using XRCC6 antibody.