

Datasheet for ABIN7127596

Recombinant anti-XRCC5 antibody[Go to Product page](#)**4** Images

Overview

Quantity:	100 µL
Target:	XRCC5
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This XRCC5 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	A synthesized peptide derived from human Ku80
Clone:	5G3
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	XRCC5
Alternative Name:	XRCC5 (XRCC5 Products)
Background:	Background: Single-stranded DNA-dependent ATP-dependent helicase. Has a role in

Target Details

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).

Aliases: 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)), XRCC5, G22P2

UniProt: [P13010](#)

Pathways: [DNA Damage Repair](#)

Application Details

Application Notes: Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200,

Restrictions: For Research Use only

Handling

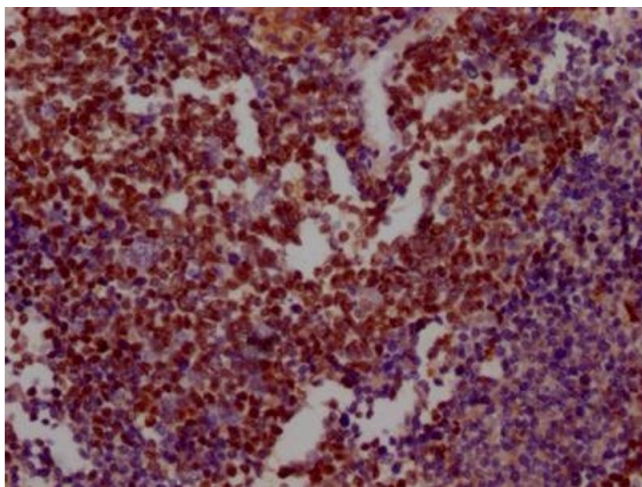
Format: Liquid

Buffer: Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 %

Handling

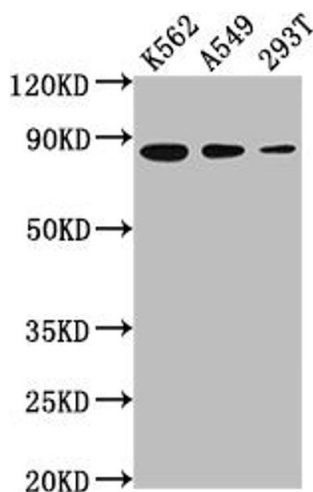
	glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



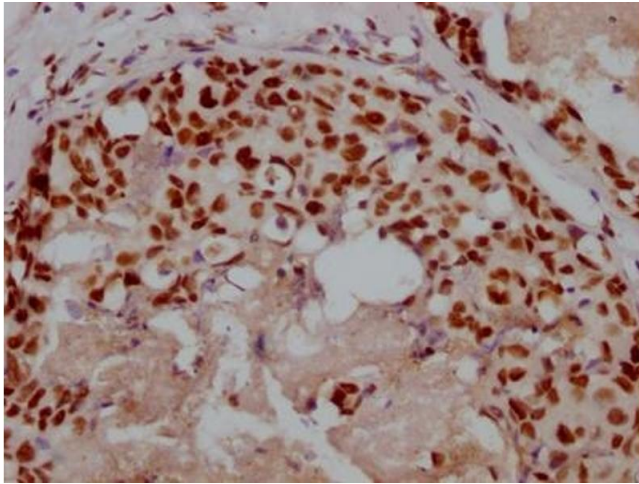
Immunohistochemistry

Image 1. IHC image of ABIN7127596 diluted at 1:100 and staining in paraffin-embedded human lung 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 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.



Western Blotting

Image 2. Western Blot Positive WB detected in: K562 whole cell lysate, A549 whole cell lysate, 293T whole cell lysate All lanes: XRCC5 antibody at 1:2000 Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 83 kDa Observed band size: 83 kDa



Immunohistochemistry

Image 3. IHC image of ABIN7127596 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 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN7127596.