

Datasheet for ABIN3044561
anti-XRCC4 antibody (N-Term)



[Go to Product page](#)

2 Images

Overview

Quantity:	100 µg
Target:	XRCC4
Binding Specificity:	AA 49-75, N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This XRCC4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for DNA repair protein XRCC4(XRCC4) detection. Tested with WB, IHC-P in Human.
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human XRCC4 (49-75aa ESEISQEADDMAMEKGKYVGELRKALL), different from the related mouse sequence by four amino acids.
Sequence:	ESEISQEADD MAMEKGKYVG ELRKALL
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for DNA repair protein XRCC4(XRCC4) detection. Tested with WB, IHC-P in Human. Gene Name: X-ray repair complementing defective repair in Chinese hamster cells 4

Product Details

Protein Name: DNA repair protein XRCC4

Purification: Immunogen affinity purified.

Target Details

Target: XRCC4

Alternative Name: XRCC4 ([XRCC4 Products](#))

Background: DNA repair protein XRCC4, also known as X-ray repair cross-complementing protein 4 or XRCC4, is a protein that in humans is encoded by the XRCC4 gene. In addition to humans, the XRCC4 protein is also expressed in many other metazoans, fungi and in plants. The X-ray repair cross-complementing protein 4 is one of several coreproteins involved in the non-homologous end joining (NHEJ) pathway to repair DNA double strand breaks(DSBs). Since XRCC4 is the key protein that enables interaction of LigIV to damaged DNA and therefore ligation of the ends, mutations in the XRCC4 gene were found to cause embryonic lethality in mice and developmental inhibition and immunodeficiency in humans. Furthermore, certain mutations in the XRCC4 gene are associated with an increased risk of cancer.

Synonyms: DNA double strand break repair and V(D)J recombination protein XRCC4 antibody|DNA repair protein XRCC4 antibody|X ray repair complementing defective repair in Chinese hamster cells 4 antibody|X ray repair cross complementing protein 4 antibody|X-ray repair cross-complementing protein 4 antibody|XRCC 4 antibody|XRCC4 antibody|XRCC4_HUMAN antibody

Gene ID: 7518

UniProt: [Q13426](#)

Pathways: [DNA Damage Repair](#), [Production of Molecular Mediator of Immune Response](#)

Application Details

Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human
IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.
Notes: Tested Species: Species with positive results. Other applications have not been tested.
Optimal dilutions should be determined by end users.

Application Details

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Sodium azide.

Preservative: Sodium azide

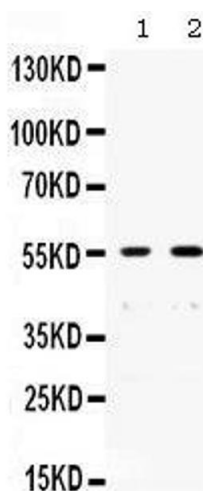
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

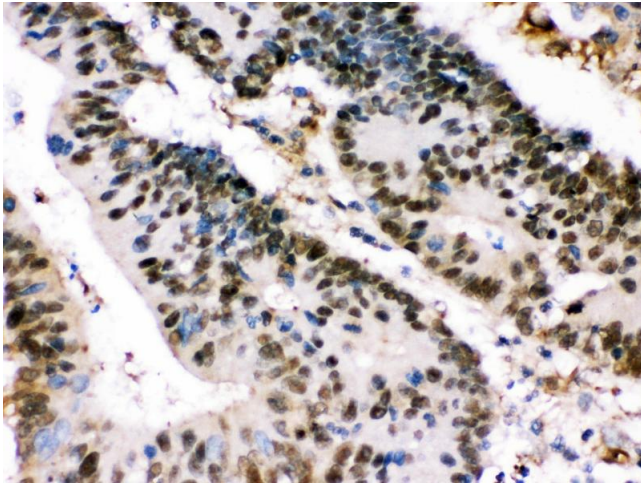
Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Images



Western Blotting

Image 1. Western blot analysis of XRCC4 expression in SW620 whole cell lysates (lane 1) and A431 whole cell lysates (lane 1). XRCC4 at 55KD was detected using rabbit anti- XRCC4 Antigen Affinity purified polyclonal antibody at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. XRCC4 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- XRCC4 Antigen Affinity purified polyclonal antibody at 1 $\mu\text{g}/\text{mL}$. The immunohistochemical section was developed using SABC method