



Product datasheet

Anti-XRCC4 antibody ab213729

1 References 5 Images

Overview

Product name	Anti-XRCC4 antibody
Description	Rabbit polyclonal to XRCC4
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Human
Immunogen	<p>Recombinant fragment corresponding to Human XRCC4 aa 164-296. Sequence:</p> <p>KCVSAKEALETDLYKRFILVLNEKTKIRSLHNKLLNAA QEREKDIKQEG ETAICSEMTADRDVPVYDESTDEESENQTDLSGLASAA VSKDDSIISLDV TDIAPSRKRRQRMQRNLGTEPKMAPQENQLQEK</p> <p>Database link: Q13426</p> <p style="text-align: right;"> Run BLAST with  Run BLAST with</p>
Positive control	Human lymph node tissue; U-251 MG cells; XRCC4 overexpression HEK293T cell lysate with a C-terminal myc-DDK tag (~3.1 kDa).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.2 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol, 59% PBS</p>
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab213729** in the following tested applications.

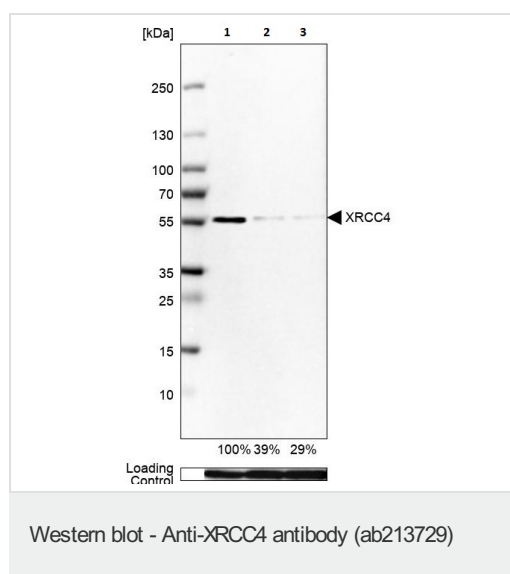
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 1 - 4 µg/ml. Fixation/Permeabilisation: PFA/Triton X-100.
IHC-P		1/200 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/100 - 1/250. Predicted molecular weight: 38 kDa.

Target

Function	Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. Binds to DNA and to DNA ligase IV (LIG4). The LIG4-XRCC4 complex is responsible for the NHEJ ligation step, and XRCC4 enhances the joining activity of LIG4. Binding of the LIG4-XRCC4 complex to DNA ends is dependent on the assembly of the DNA-dependent protein kinase complex DNA-PK to these DNA ends.
Tissue specificity	Widely expressed.
Sequence similarities	Belongs to the XRCC4 family.
Post-translational modifications	Phosphorylated by PRKDC. The phosphorylation seems not to be necessary for binding to DNA. Phosphorylation by CK2 promotes interaction with APTX. Monoubiquitinated. Sumoylation at Lys-210 is required for nuclear localization and recombination efficiency. Has no effect on ubiquitination.
Cellular localization	Nucleus.

Images

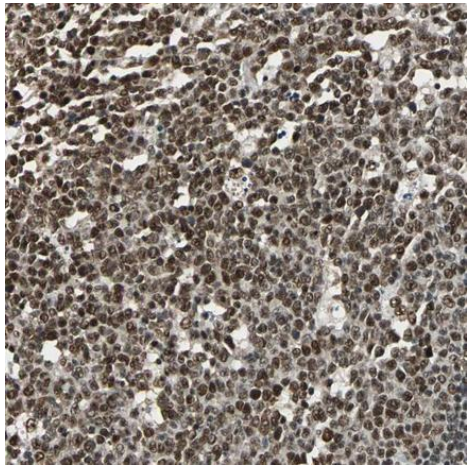


All lanes : Anti-XRCC4 antibody (ab213729)

Lane 1 : Rh30 cells transfected with control siRNA

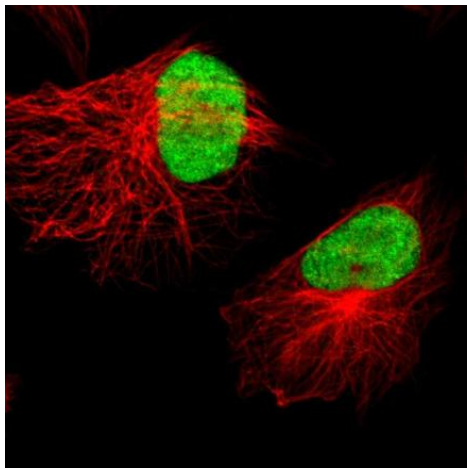
Lanes 2-3 : Rh30 cells transfected with target specific siRNA probe

Predicted band size: 38 kDa



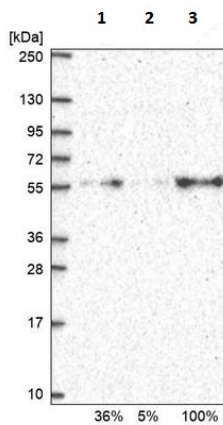
Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human lymph node tissue labeling XRCC4 with ab213729 at 1/200 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-XRCC4 antibody (ab213729)



Immunofluorescent analysis of PFA-fixed, Triton X-100 permeabilised U-251 MG cells labeling XRCC4 with ab213729 at 4 µg/ml (green).

Immunocytochemistry/ Immunofluorescence - Anti-XRCC4 antibody (ab213729)



All lanes : Anti-XRCC4 antibody (ab213729)

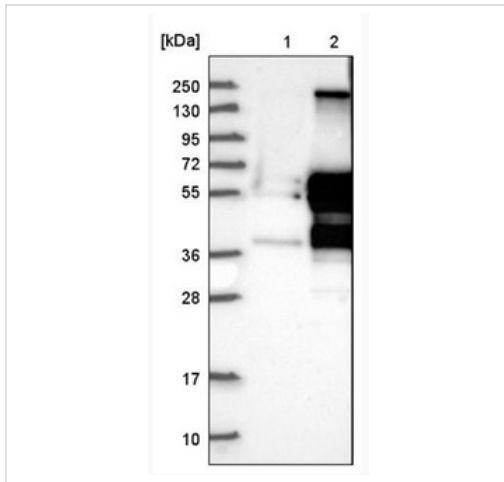
Lane 1 : U2OS cells transfected with target specific siRNA probe 1

Lane 2 : U2OS cells transfected with target specific siRNA probe 2

Lane 3 : U2OS cells transfected with control siRNA

Predicted band size: 38 kDa

Western blot - Anti-XRCC4 antibody (ab213729)



Western blot - Anti-XRCC4 antibody (ab213729)

All lanes : Anti-XRCC4 antibody (ab213729) at 1/100 dilution

Lane 1 : Negative control (vector only transfected HEK293T lysate)

Lane 2 : XRCC4 overexpression HEK293T cell lysate with a C-terminal myc-DDK tag (~3.1 kDa).

Predicted band size: 38 kDa

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