

<b>Cat. No:</b>	ABN19974
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100µL
<b>Clone:</b>	Polyclonal
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Immunogen:</b>	The antiserum was produced against synthesized peptide derived from human XRCC4. AA range:261-310
<b>Reactivity:</b>	Human,Rat,Mouse
<b>Applications:</b>	WB 1:500-1:2000,ELISA 1:10000-1:20000
<b>Molecular Weight:</b>	40kDa
<b>Purification:</b>	Affinity purification
<b>Synonyms:</b>	XRCC4; DNA repair protein XRCC4; X-ray repair cross-complementing protein 4
<b>Background:</b>	<p>The protein encoded by this gene functions together with DNA ligase IV and the DNA-dependent protein kinase in the repair of DNA double-strand breaks. This protein plays a role in both non-homologous end joining and the completion of V(D)J recombination. Mutations in this gene can cause short stature, microcephaly, and endocrine dysfunction (SSMED). Alternative splicing generates several transcript variants. [provided by RefSeq, Dec 2015],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.,PTM:Monoubiquitinated.,PTM:Phosphorylated by PRKDC. The phosphorylation seems not to be necessary for binding to DNA. Phosphorylation by CK2 promotes interaction with APTX.,PTM:Sumoylation at Lys-210 is required for nuclear localization and recombination efficiency. Has no effect on ubiquitination.,similarity:Belongs to the XRCC4 family.,subunit:Homodimer and homotetramer in solution. The homodimer associates with LIG4, and the LIG4-XRCC4 complex associates in a DNA-dependent manner with the DNA-PK complex formed by the Ku p70/p86 dimer (G22P1/G22P2) and PRKDC. Seems to interact directly with PRKDC but not with the Ku p70/86 dimer. Interacts with XLF/Cernunnos. Interacts with APTX and APLF.,tissue specificity:Widely expressed.,</p>
<b>Form:</b>	Liquid
<b>Buffer:</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Storage:</b>	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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