

## XRCC4 Polyclonal Antibody

<b>Catalog No :</b>	YT4921
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	XRCC4
<b>Fields :</b>	>>Non-homologous end-joining
<b>Gene Name :</b>	XRCC4
<b>Protein Name :</b>	DNA repair protein XRCC4
<b>Human Gene Id :</b>	7518
<b>Human Swiss Prot No :</b>	Q13426
<b>Mouse Swiss Prot No :</b>	Q924T3
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human XRCC4. AA range:261-310
<b>Specificity :</b>	XRCC4 Polyclonal Antibody detects endogenous levels of XRCC4 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 40kD

**Cell Pathway :** Non-homologous end-joining;

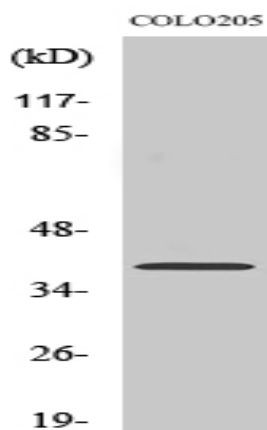
**Background :** The protein encoded by this gene functions together with DNA ligase IV and the DNA-dependent protein kinase in the repair of DNA double-strand breaks. This protein plays a role in both non-homologous end joining and the completion of V(D)J recombination. Mutations in this gene can cause short stature, microcephaly, and endocrine dysfunction (SSMED). Alternative splicing generates several transcript variants. [provided by RefSeq, Dec 2015],

**Function :** 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-dep

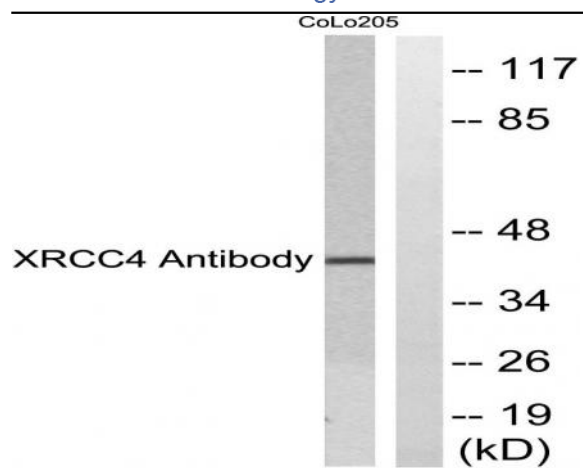
**Subcellular Location :** Nucleus . Chromosome . Localizes to site of double-strand breaks. .; [Protein XRCC4, C-terminus]: Cytoplasm . Translocates from the nucleus to the cytoplasm following cleavage by caspase-3 (CASP3). .

**Expression :** Widely expressed.

## Products Images



Western Blot analysis of various cells using XRCC4 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysates from COLO205 cells, using XRCC4 Antibody. The lane on the right is blocked with the synthesized peptide.