# XRCC4 Polyclonal Antibody

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| **Catalog No** | BYab-00554 |
| **Isotype** | IgG |
| **Reactivity** | Human;Rat;Mouse; |
| **Applications** | WB;ELISA |
| **Gene Name** | XRCC4 |
| **Protein Name** | DNA repair protein XRCC4 |
| **Immunogen** | The antiserum was produced against synthesized peptide derived from human XRCC4. AA range:261-310 |
| **Specificity** | XRCC4 Polyclonal Antibody detects endogenous levels of XRCC4 protein. |
| **Formulation** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. |
| **Source** | Polyclonal, Rabbit,IgG |
| **Purification** | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| **Dilution** | Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. |
| **Concentration** | 1 mg/ml |
| **Purity** | ≥90% |
| **Storage Stability** | -20°C/1 year |
| **Synonyms** | XRCC4; DNA repair protein XRCC4; X-ray repair cross-complementing protein 4 |
| **Observed Band** | 40kD |
| **Cell Pathway** | 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). . |
| **Tissue Specificity** | Widely expressed. |
| **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 |

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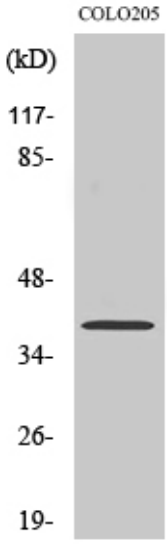
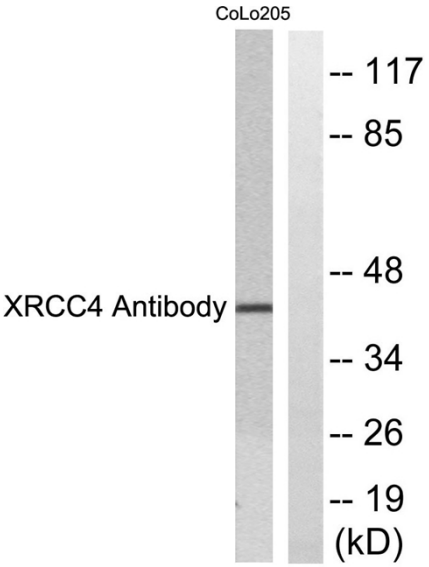
| | ubiquitination.,similarity:Belongs to the XRCC4 family.,subunit:Homodimer and homotetramer in solution. The homodimer associates with LIG4, and the LIG4-XRCC4 complex associates in a DNA-dep |
| **Background** | The protein encoded by this gene functions together with DNA ligase IV and the DNA-dependent 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], |
| **matters needing attention** | Avoid repeated freezing and thawing! |
| **Usage suggestions** | This product can be used in immunological reaction related experiments. For more information, please consult technical personnel. |

## 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.