Product Name: XRCC4 Rabbit Polyclonal Antibody
Catalog #: APRab19974

Summary

Production Name	XRCC4 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	XRCC4
Alternative Names	XRCC4; DNA repair protein XRCC4; X-ray repair cross-complementing protein 4
Gene ID	7518.0
SwissProt ID	Q13426.The antiserum was produced against synthesized peptide derived from human XRCC4. AA range:261-310

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000
Molecular Weight	40kD

Background

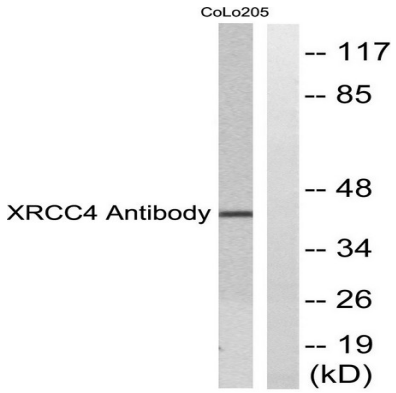
Product Name: XRCC4 Rabbit Polyclonal Antibody
Catalog #: APRab19974

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.,

Research Area

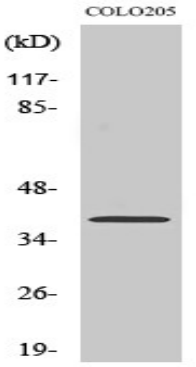
Non-homologous end-joining;

Image Data



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

Product Name: XRCC4 Rabbit Polyclonal Antibody
Catalog #: APRab19974



Western Blot analysis of various cells using XRCC4 Polyclonal Antibody. Secondary antibody was diluted at 1:20000

Note

For research use only.