

XRCC4 Polyclonal Antibody

Catalog No :	YT4921
Reactivity :	Human;Mouse
Applications :	WB;ELISA
Target :	XRCC4
Fields :	>>Non-homologous end-joining
Gene Name :	XRCC4
Protein Name :	DNA repair protein XRCC4
Human Gene Id :	7518
Human Swiss Prot No :	Q13426
Mouse Swiss Prot No :	Q924T3
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
Dilution :	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 40kD

Cell Pathway : Non-homologous end-joining;

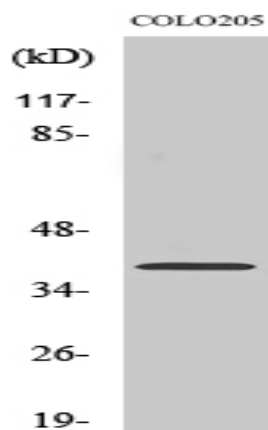
Background : The protein encoded by this gene functions together with DNA ligase IV and the DNA-dependent protein kinase in the repair of DNA double-strand breaks. This protein plays a role in both non-homologous end joining and the completion of V(D)J recombination. Mutations in this gene can cause 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

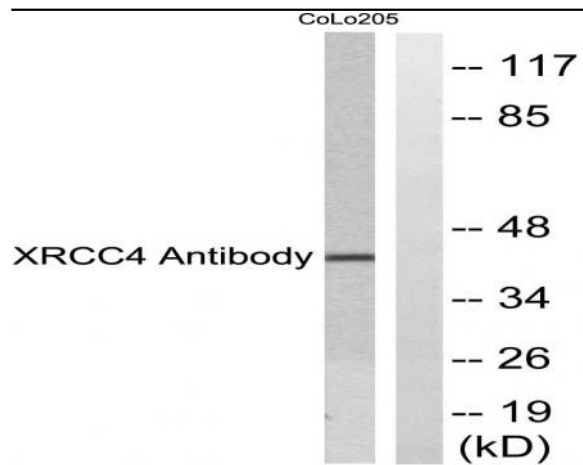
Subcellular Location : Nucleus . Chromosome . Localizes to site of double-strand breaks. .; [Protein XRCC4, C-terminus]: Cytoplasm . Translocates from the nucleus to the cytoplasm following cleavage by caspase-3 (CASP3). .

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.