



XRCC4 Monoclonal Antibody

Catalog No	YP-mAb-00554
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	XRCC4
Immunogen	The antiserum was produced against synthesized peptide derived from human XRCC4. AA range:261-310
Specificity	XRCC4 Monoclonal Antibody detects endogenous levels of XRCC4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DNA repair protein XRCC4;hXRCC4;Protein XRCC4;C-terminus;X-ray repair cross-complementing;XRCC4;X-ray repair cross-complementing protein 4
Observed Band	40kD
Calculated Molecular Weight	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 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],

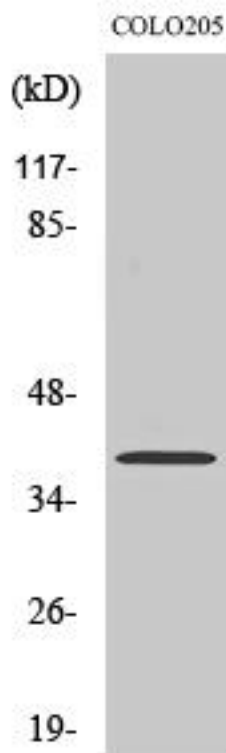
matters needing attention

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 Monoclonal Antibody