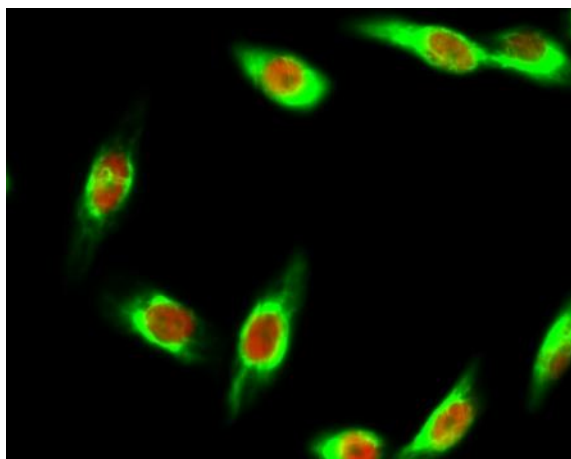


XRCC4 Monoclonal Antibody(5C10)

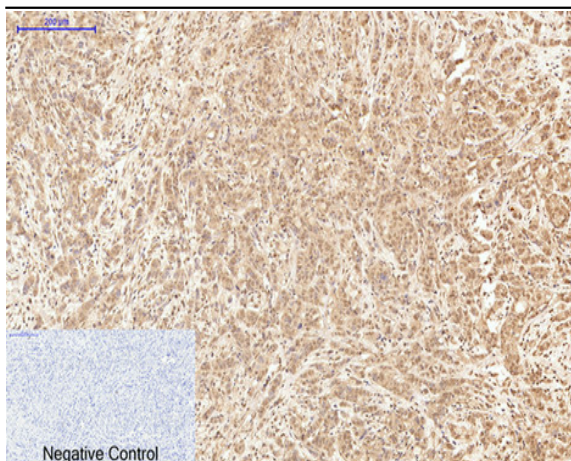
Catalog No :	YM3086
Reactivity :	Human
Applications :	WB;IHC;IF;IP
Target :	XRCC4
Fields :	>>Non-homologous end-joining
Gene Name :	XRCC4
Protein Name :	DNA repair protein XRCC4
Human Gene Id :	7518
Human Swiss Prot No :	Q13426
Mouse Gene Id :	108138
Mouse Swiss Prot No :	Q924T3
Immunogen :	Synthetic Peptide of XRCC4
Specificity :	The antibody detects endogenous XRCC4 proteins.
Formulation :	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source :	Monoclonal, Mouse
Dilution :	WB 1:2000 IP:1:200 IF 1:200 IHC 1:50-300
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band :	38kD
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.

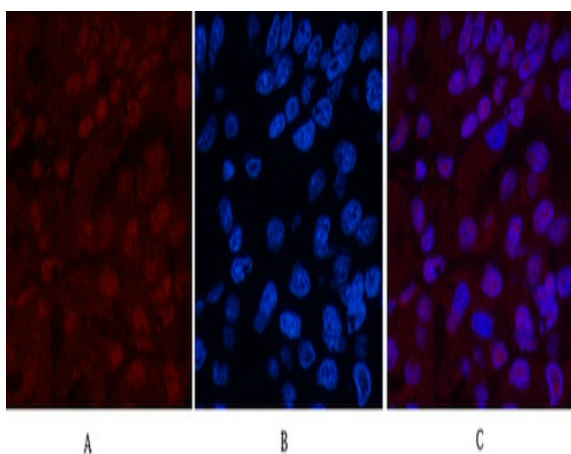
Products Images



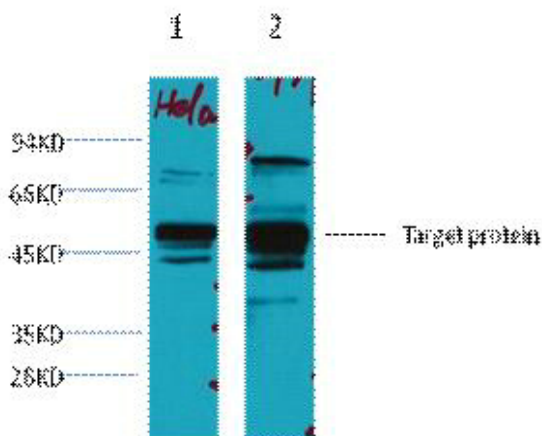
Immunofluorescence analysis of HeLa cell. 1, Bak Polyclonal Antibody(green) was diluted at 1:200(4° overnight). (red) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog:RS3608 was diluted at 1:1000(room temperature, 50min).



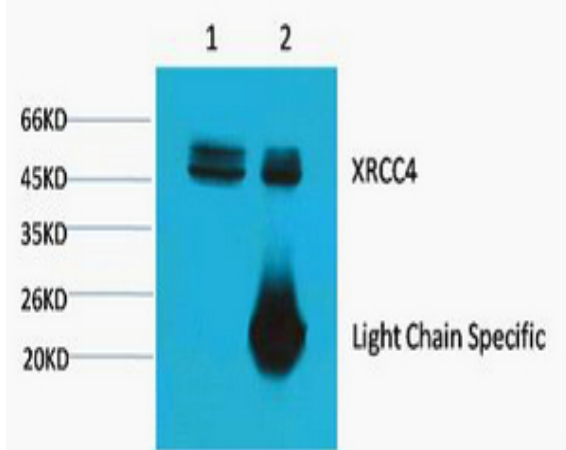
Immunohistochemical analysis of paraffin-embedded Human-breast-cancer tissue. 1, XRCC4 Monoclonal Antibody(5C10) was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Human-liver-cancer tissue. 1, XRCC4 Monoclonal Antibody(5C10)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of 1) HeLa, 2) 293T, diluted at 1:3000.



1) Input: HeLa Cell Lysate 2) IP product: IP dilute 1:200