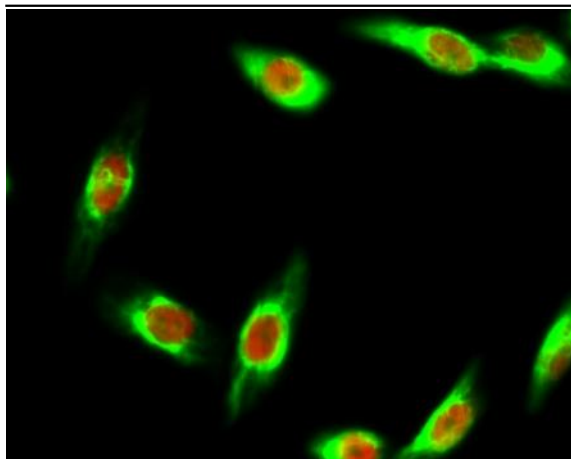


## XRCC4 Monoclonal Antibody(5C10)

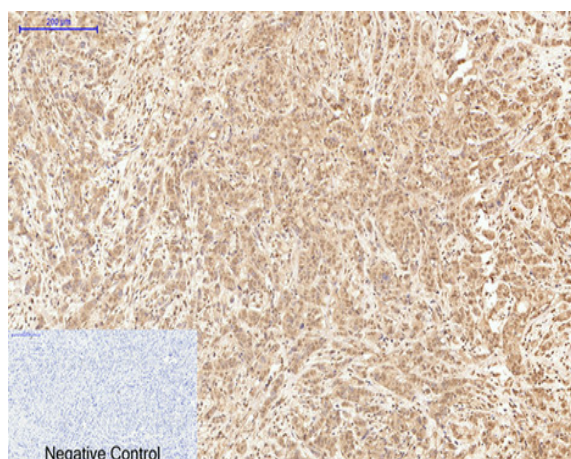
<b>Catalog No :</b>	YM3086
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IHC;IF;IP
<b>Target :</b>	XRCC4
<b>Fields :</b>	>>Non-homologous end-joining
<b>Gene Name :</b>	XRCC4
<b>Protein Name :</b>	DNA repair protein XRCC4
<b>Human Gene Id :</b>	7518
<b>Human Swiss Prot No :</b>	Q13426
<b>Mouse Gene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

<b>Observed Band :</b>	38kD
<b>Cell Pathway :</b>	Non-homologous end-joining;
<b>Background :</b>	<p>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],</p>
<b>Function :</b>	<p>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</p>
<b>Subcellular Location :</b>	<p>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). .</p>
<b>Expression :</b>	Widely expressed.
<b>Tag :</b>	ip,hot
<b>Sort :</b>	24365
<b>Host :</b>	Mouse
<b>Modifications :</b>	Unmodified

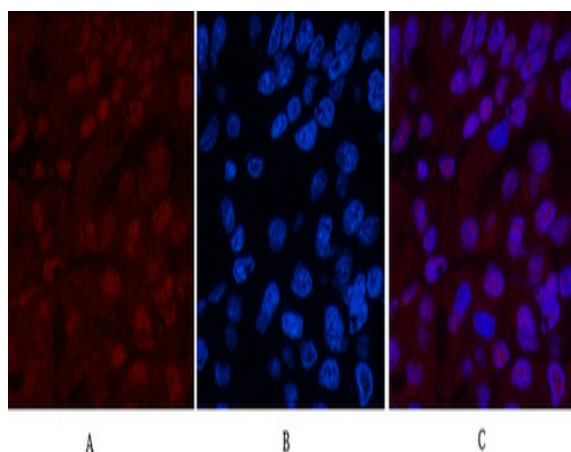
## Products Images



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).

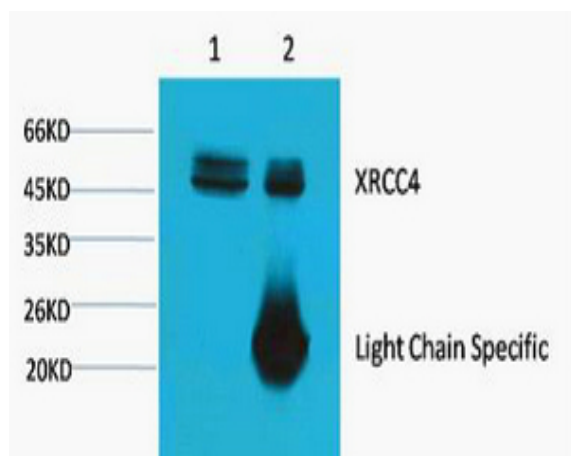
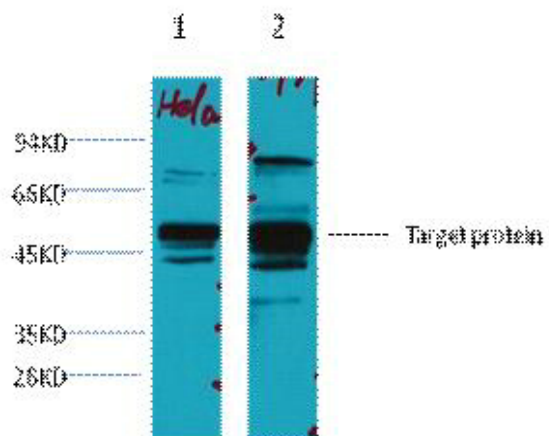


Immunohistochemical analysis of paraffin-embedded Human-breast-cancer tissue. 1,XRCC4 Monoclonal Antibody(5C10) was diluted at 1:200(4 ° C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 ° C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative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