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XRCC4 (5C10) Mouse mAb

CatalogNo: YM3086 Comparable Abs

Key Features

Host Species

Mouse

Reactivity

Human

Applications
• WB,IHC,IF,IP

MW • 38kD (Observed)

Recommended Dilution Ratios

WB 1:2000 IP 1:200 IF 1:200 IHC 1:50-300

Storage

Storage*-15°C to -25°C/1 year(Do not lower than -25°C)FormulationPBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.

Basic Information

Clonality	Monoclonal
Clone Number	5C10

Immunogen Information

Immunogen	Synthetic Peptide of XRCC4
Specificity	The antibody detects endogenous XRCC4 proteins.

Target Information

Protein Name DNA repair protein XRCC4

Organism	Gene ID	UniProt ID
Human	<u>7518;</u>	<u>Q13426;</u>
Mouse	<u>108138;</u>	<u>Q924T3;</u>

CellularNucleus . 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-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.,

Validation Data



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.



	1	2	
66KD	-		
45KD	-	-	XRCC4
35KD	-		
26KD	-		
20KD			Light Chain Specific

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

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

Contact information

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Please scan the QR code to access additional product information: XRCC4 (5C10) Mouse mAb

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Antibody | ELISA Kits | Protein | Reagents