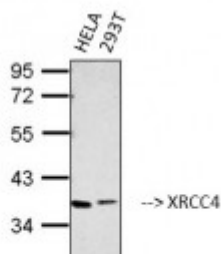


Anti-XRCC4 antibody



Western Blot (WB) analysis of 1. HELA 2. 293T cells using XRCC4 Monoclonal Antibody. (STJ96988)



Description

XRCC4 is a protein encoded by the XRCC4 gene which is approximately 38,2 kDa. XRCC4 is localised to the nucleus. It is involved in the HIV life cycle, DNA double-strand break repair, SUMOylation and metabolism of proteins. It functions together with DNA ligase IV and the DNA-dependent protein kinase in the repair of DNA double-strand breaks. It plays a role in both non-homologous end joining and the completion of V(D)J recombination. XRCC4 is expressed in the bone marrow, liver and blood. Mutations in the XRCC4 gene may result in endocrine dysfunction. STJ96988 was developed from clone 5C10 and was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. The antibody detects endogenous XRCC4 proteins.

Model	STJ96988
Host	Mouse
Reactivity	Human
Applications	IP, WB
Immunogen	Synthetic Peptide
Gene ID	7518
Gene Symbol	XRCC4
Dilution range	WB 1:2000IP 1:200
Specificity	The antibody detects endogenous XRCC4 proteins.
Tissue Specificity	Widely expressed.
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.

Clone ID	5C10
Note	For Research Use Only (RUO).
Protein Name	DNA repair protein XRCC4 X-ray repair cross-complementing protein 4
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:12831OMIM:194363
Alternative Names	DNA repair protein XRCC4 X-ray repair cross-complementing protein 4
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.
Cellular Localization	Nucleus
Post-translational Modifications	Phosphorylated by PRKDC. The phosphorylation seems not to be necessary for binding to DNA. Phosphorylation by CK2 promotes interaction with APTX. Monoubiquitinated.; Sumoylation at Lys-210 is required for nuclear localization and recombination efficiency. Has no effect on ubiquitination.