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XRCC2 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19368a

Product Information

Application	WB, E
Primary Accession	O43543
Other Accession	NP_005422.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30583
Calculated MW	31956
Antigen Region	1-30

Additional Information

Gene ID	7516
Other Names	DNA repair protein XRCC2, X-ray repair cross-complementing protein 2, XRCC2
Target/Specificity	This XRCC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human XRCC2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	XRCC2 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	XRCC2
Function	Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA, thought to repair chromosomal fragmentation, translocations and deletions. Part of the RAD51 paralog protein complex

BCDX2 which acts in the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, BCDX2 acts downstream of BRCA2 recruitment and upstream of RAD51 recruitment. BCDX2 binds predominantly to the intersection of the four duplex arms of the Holliday junction and to junction of replication forks. The BCDX2 complex was originally reported to bind single-stranded DNA, single-stranded gaps in duplex DNA and specifically to nicks in duplex DNA.

Cellular Location Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome

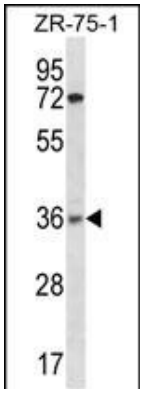
Background

This gene encodes a member of the RecA/Rad51-related protein family that participates in homologous recombination to maintain chromosome stability and repair DNA damage. This gene is involved in the repair of DNA double-strand breaks by homologous recombination and it functionally complements Chinese hamster irs1, a repair-deficient mutant that exhibits hypersensitivity to a number of different DNA-damaging agents.

References

Liu, Y., et al. Carcinogenesis 31(10):1762-1769(2010)
Briggs, F.B., et al. Am. J. Epidemiol. 172(2):217-224(2010)
Liu, C.Y., et al. Carcinogenesis 31(7):1259-1263(2010)
Monsees, G.M., et al. Breast Cancer Res. Treat. (2010) In press :
Lipkin, S.M., et al. Cancer Prev Res (Phila) 3(5):597-603(2010)

Images



XRCC2 Antibody (N-term)(Cat. #AP19368a) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the XRCC2 antibody detected the XRCC2 protein (arrow).