10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-XRCC2 Antibody

Catalog # AP51616

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O43543
Reactivity	Human, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	31956

Additional Information

Gene ID	7516
Other Names	DNA repair protein XRCC2; X-ray repair cross-complementing protein 2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human XRCC2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

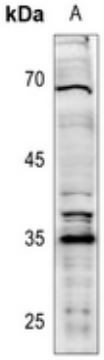
Protein Information

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

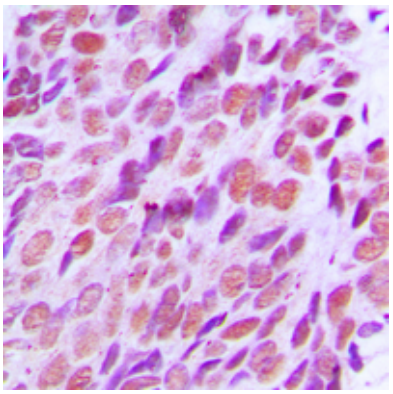
References

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Tambini C.E.,et al.Genomics 41:84-92(1997).
Cartwright R.,et al.Nucleic Acids Res. 26:3084-3089(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
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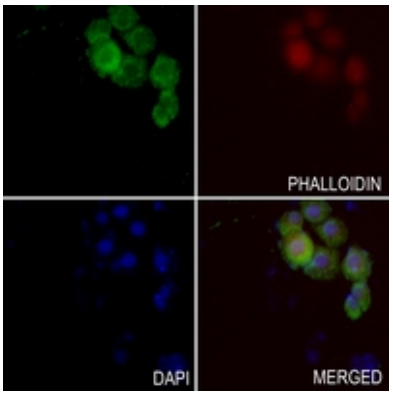
Images



Western blot analysis of XRCC2 expression in Hela (A) whole cell lysates. (Predicted band size: 31 kD; Observed band size: 35 kD)



Immunohistochemical analysis of XRCC2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of XRCC2 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.