

XRCC3 antibody - middle region

Rabbit Polyclonal Antibody

Catalog # AI14647

Product Information

Application	WB
Primary Accession	O43542
Other Accession	NM_005432 , NP_005423
Reactivity	Human, Mouse, Dog, Guinea Pig, Bovine
Predicted	Human, Mouse, Dog, Guinea Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37850

Additional Information

Gene ID	7517
Alias Symbol	CMM6
Other Names	DNA repair protein XRCC3, X-ray repair cross-complementing protein 3, XRCC3
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-XRCC3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	XRCC3 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	XRCC3
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 CX3 which acts in the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, CX3 acts downstream of RAD51 recruitment; the complex binds predominantly to the intersection of the four duplex arms of the Holliday junction (HJ) and to junctions of replication forks. Involved in HJ resolution and thus in processing HR intermediates late in the DNA repair process; the function may be linked to the CX3 complex and seems to involve GEN1 during mitotic cell cycle progression. Part of a PALB2-scaffolded HR complex

containing BRCA2 and RAD51C and which is thought to play a role in DNA repair by HR. Plays a role in regulating mitochondrial DNA copy number under conditions of oxidative stress in the presence of RAD51 and RAD51C.

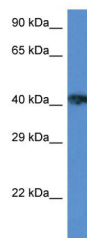
Cellular Location

Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Mitochondrion.
Note=Accumulates in discrete nuclear foci prior to DNA damage, and these foci persist throughout the time course of DNA repair

References

Liu N.,et al.Mol. Cell 1:783-793(1998).
Masson J.Y.,et al.Genes Dev. 15:3296-3307(2001).
Kuschel B.,et al.Hum. Mol. Genet. 11:1399-1407(2002).
Miller K.A.,et al.J. Biol. Chem. 277:8406-8411(2002).
Liu N.,et al.Nucleic Acids Res. 30:1009-1015(2002).

Images



WB Suggested Anti-XRCC3 Antibody Titration: 1.0 µg/ml
Positive Control: ACHN Whole Cell

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