

XRCC3 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP6933c

Specification

XRCC3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession <u>043542</u>

XRCC3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 7517

Other Names

DNA repair protein XRCC3, X-ray repair cross-complementing protein 3, XRCC3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6933c was selected from the Center region of human XRCC3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

XRCC3 Antibody (Center) Blocking Peptide - Protein Information

Name XRCC3

Function

XRCC3 Antibody (Center) Blocking Peptide - Background

XRCC3 is a member of the RecA/Rad51-related protein family that participates in homologous recombination to maintain chromosome stability and repair DNA damage.

XRCC3 Antibody (Center) Blocking Peptide - References

Gangwar,R., et.al., Mutat. Res. (2009)Young,R.P., et.al., Postgrad Med J 85 (1008), 515-524 (2009)



Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA, thought to repair chromosomal fragmentation, translocations and deletions. Part of the RAD21 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 HI 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

XRCC3 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides