

#### KD-Validated Anti-XRCC3 Mouse Monoclonal Antibody Mouse monoclonal antibody Catalog # AGI2088

## **Specification**

# **KD-Validated Anti-XRCC3 Mouse Monoclonal Antibody - Product Information**

Application
Primary Accession
Reactivity
Clonality
Isotype
Calculated MW
Gene Name
Aliases

WB O43542 Human Monoclonal Mouse IgG1 Predicted, 38 kDa, observed, 38 kDa KDa XRCC3 XRCC3; X-Ray Repair Cross Complementing 3; DNA Repair Protein XRCC3; X-Ray Repair Complementing Defective Repair In Chinese Hamster Cells 3; X-Ray Repair Cross-Complementing Protein 3; RAD51-Like; CMM6 Recombinant protein of human XRCC3

Immunogen

### **KD-Validated Anti-XRCC3 Mouse Monoclonal Antibody - Additional Information**

Gene ID 7517 Other Names DNA repair protein XRCC3, X-ray repair cross-complementing protein 3, XRCC3

### **KD-Validated Anti-XRCC3 Mouse Monoclonal Antibody - 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



# **KD-Validated Anti-XRCC3 Mouse Monoclonal Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## KD-Validated Anti-XRCC3 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-XRCC3 antibody (Cat#AGI2088). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-XRCC3 antibody (Cat#AGI2088, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-XRCC3 antibody (Cat#AGI2088). XRCC3 expression in wild-type (WT) and XRCC3 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-XRCC3 antibody (Cat#AGI2088, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.