10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-XRCC3 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11870

Specification

Anti-XRCC3 Antibody - Product Information

Application	**IHC, IF, WB**
Primary Accession	O43542
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**37850**

Anti-XRCC3 Antibody - Additional Information

Gene ID 7517

Positive Control	**WB: HeLa, mouse kidney, rat kidney lysates; IHC: human tonsil tissue; IFc: HeLa cell**
Application & Usage	**WB; 1:500 – 1:2000, IHC; 1:50 – 1:200, IF/IC; 1:50 – 1:100**
Alias Symbol	**XRCC3**

Other Names
DNA repair protein XRCC3; X-ray repair cross-complementing protein 3

Appearance
Colorless liquid

Formulation
In 0.42% Potassium phosphate; 0.87% Sodium chloride; pH 7.3; 30% glycerol and 0.01% sodium azide

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
Anti-XRCC3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-XRCC3 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.

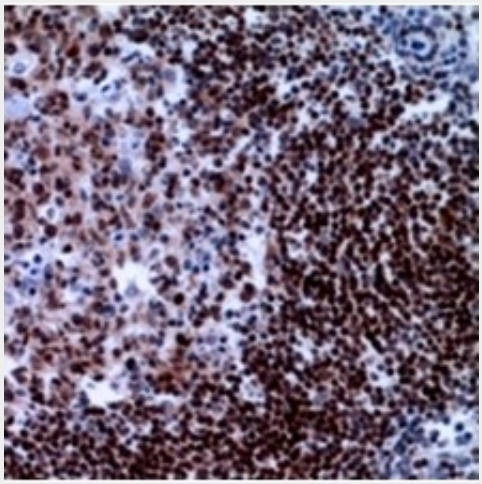
Cellular Location
Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Mitochondrion. Note=Accumulates in discrete nuclear foci prior to DNA damage, and these foci persist throughout the time course of DNA repair

Anti-XRCC3 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-XRCC3 Antibody - Images



Immunohistochemical analysis of XRCC3 staining in H.tonsil formalin fixed paraffin embedded tissue section.

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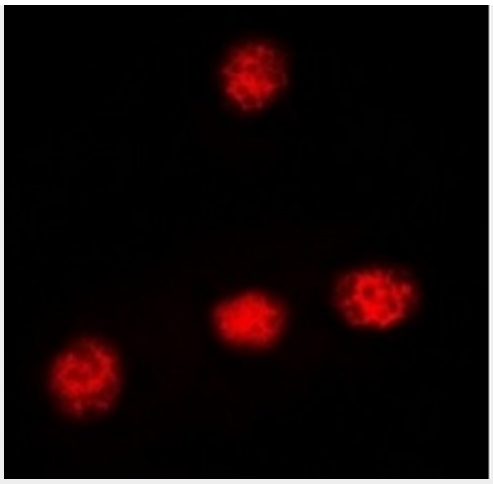
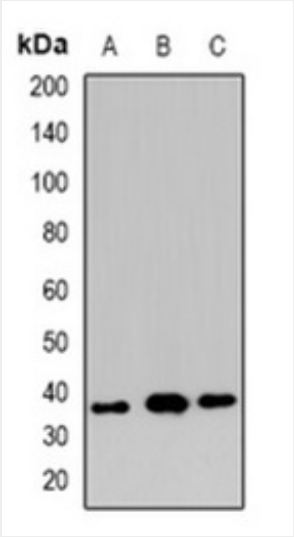


Immunofluorescent analysis of XRCC3 staining in Hela cells.



Western blot analysis of XRCC3 expression in Hela(A); M.kidney(B); R.kidney(C) whole cell lysates.

Anti-XRCC3 Antibody - Background

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 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.