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Anti-XRCC3 Antibody
Rabbit polyclonal antibody to XRCC3
Catalog # AP60821

Specification

Anti-XRCC3 Antibody - Product Information

Application	**WB, IF/IC, IHC**
Primary Accession	O43542
Other Accession	Q9CXE6
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**37850**

Anti-XRCC3 Antibody - Additional Information

Gene ID 7517

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

Target/Specificity
Recognizes endogenous levels of XRCC3 protein.

Dilution
WB~~WB (1/500 - 1/2000), IH (1/50 - 1/200), IF/IC (1/50 - 1/100)
IF/IC~~N/A
IHC~~1:100~500

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

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.

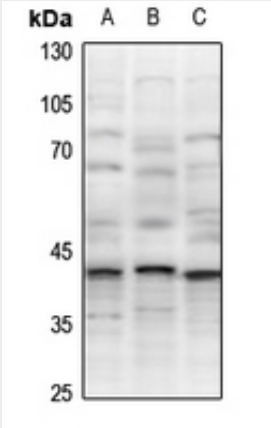
Cellular Location
Nucleus. Cytoplasm. Cytoplasm, perinuclear region. Mitochondrion. Note=Accumulates in discrete nuclear foci prior to DNA damage, and these foci persist throughout the time course of DNA repair

Anti-XRCC3 Antibody - Protocols

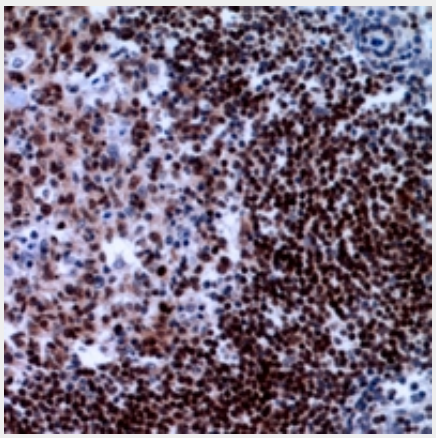
Provided below are standard protocols that you may find useful for product applications.

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

Anti-XRCC3 Antibody - Images



Western blot analysis of XRCC3 expression in A549 (A), PC12 (B), AML12 (C) whole cell lysates.



Immunohistochemical analysis of XRCC3 staining in human tonsil formalin fixed paraffin

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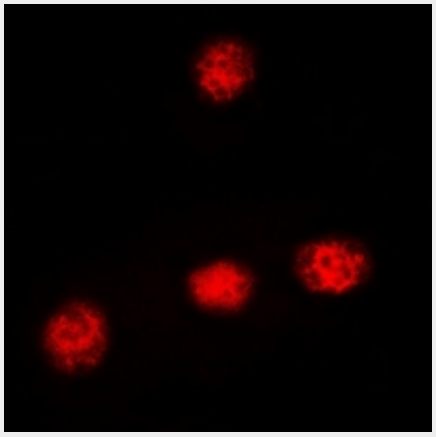
embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of XRCC3 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 DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Anti-XRCC3 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human XRCC3. The exact sequence is proprietary.