

## Anti-DNA repair protein XRCC3 XRCC3 Antibody Picoband®

Catalog Number: PA1697

### About Xrcc3

XRCC3 (X-RAY REPAIR, COMPLEMENTING DEFECTIVE, IN CHINESE HAMSTER, 3) is a DNA repair protein that in humans, is encoded by the XRCC3 gene. The 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 interacts directly with RAD51 and may cooperate with RAD51 during recombinational repair. XRCC3 function is not limited to HR initiation, but extends to later stages in formation and resolution of HR intermediates, possibly by stabilizing heteroduplex DNA. The gene functionally complements Chinese hamster irs1SF, a repair-deficient mutant that exhibits hypersensitivity to a number of different DNA-damaging agents and is chromosomally unstable. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity.

### Overview

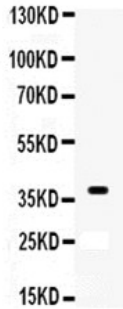
Product Name	Anti-DNA repair protein XRCC3 XRCC3 Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-DNA repair protein XRCC3 XRCC3 Antibody catalog # PA1697. Tested in IHC, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg NaN <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9CXE6

### Technical Details

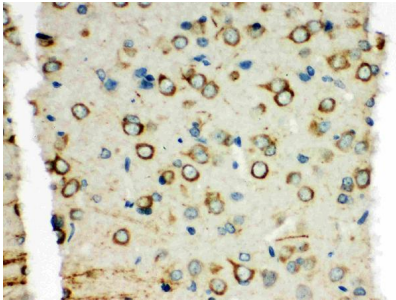
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse XRCC3, identical to the related rat sequence.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

	blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Rat, Mouse Western blot, 0.1-0.5ug/ml, Mouse, Rat

## Anti-DNA repair protein XRCC3 XRCC3 Antibody Picoband® (PA1697) Images



Western blot analysis of -XRCC3 using anti--XRCC3 antibody (PA1697). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Mouse Brain Tissue Lysates, After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti--XRCC3 antigen affinity purified polyclonal antibody (Catalog # PA1697) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for -XRCC3 at approximately 38KD. The expected band size for -XRCC3 is at 38KD.



IHC analysis of XRCC3 using anti-XRCC3 antibody (PA1697). XRCC3 was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-XRCC3 Antibody (PA1697) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

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