

Mouse anti-Human XRCC1 Monoclonal Antibody | anti-XRCC1 antibody

Anti-XRCC1 Antibody Picoband (monoclonal, 10E10)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126873	Mouse	Human	Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

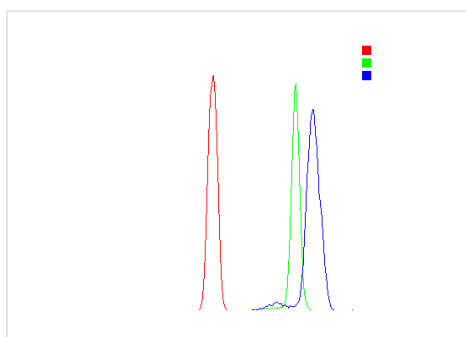
PRODUCT SYNONYMS

XRCC1; Monoclonal Antibody; Anti-XRCC1 Antibody Picoband (monoclonal; 10E10); anti-XRCC1 antibody

PRODUCT SPECIFICATIONS

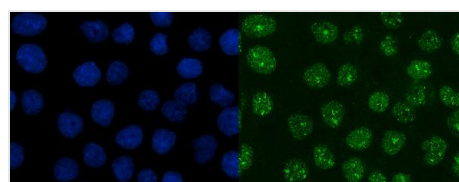
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2b
Clone Number	10E10
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-XRCC1 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E coli-derived human XRCC1 recombinant protein (Position: E538-A633).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

IMAGES



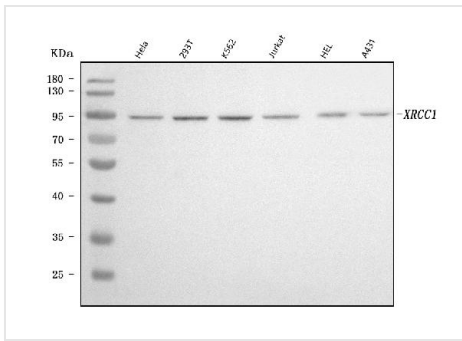
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of HeLa cells using anti-XRCC1 antibody (AAA126873). Overlay histogram showing HeLa cells stained with AAA126873 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-XRCC1 Antibody (AAA126873, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of XRCC1 using anti-XRCC1 antibody (AAA126873).XRCC1 was detected in an immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL mouse anti-XRCC1 Antibody (AAA126873) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Mouse IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of XRCC1 using anti-XRCC1 antibody (AAA126873). 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 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: human Jurkat whole cell lysates, Lane 5: human HEL whole cell lysates, Lane 6: human A431 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-XRCC1 antigen affinity purified monoclonal antibody (#AAA126873) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse 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 with Tanon 5200 system. A specific band was detected for XRCC1 at approximately 95 kDa. The expected band size for XRCC1 is at 69 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-XRCC1 antibody	XRCC1(X-RAY REPAIR, COMPLEMENTING DEFECTIVE, IN CHINESE HAMSTER, 1) is a DNA repair protein which complexes with DNA ligase III. The protein encoded by this gene is involved in the efficient repair of DNA single-strand breaks formed by exposure to ionizing radiation and alkylating agents. The XRCC1 gene is mapped to 19q13.31. The XRCC1 interacts with DNA ligase III, polymerase beta and poly (ADP-ribose) polymerase to participate in the base excision repair pathway. It may play a role in DNA processing during meiosis and recombination in germ cells. A rare microsatellite polymorphism in this gene is associated with cancer in patients of varying radiosensitivity. XRCC1 is phosphorylated in vivo and in vitro by CK2, and CK2 phosphorylation of XRCC1 on ser518, thr519, and thr523 largely determines aprataxin binding to XRCC1 through its FHA domain.
Product Categories/Family for anti-XRCC1 antibody	Primary Antibodies , Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	190684675
NCBI GeneID	7515
NCBI Accession #	NP_006288.2
NCBI GenBank Nucleotide #	NM_006297.2
UniProt Accession #	P18887 ; Q6IBS4 ; Q9HCB1
Molecular Weight	69,477 Da
NCBI Official Full Name	DNA repair protein XRCC1
NCBI Official Synonym Full Names	X-ray repair complementing defective repair in Chinese hamster cells 1
NCBI Official Symbol	XRCC1
NCBI Official Synonym Symbols	RCC
NCBI Protein Information	DNA repair protein XRCC1; X-ray repair cross-complementing protein 1; X-ray-repair, complementing defective, repair in Chinese hamster

UniProt Protein Name	DNA repair protein XRCC1
UniProt Gene Name	XRCC1
UniProt Entry Name	XRCC1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/xrcc1-antibody-clone-10e10-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/126873>