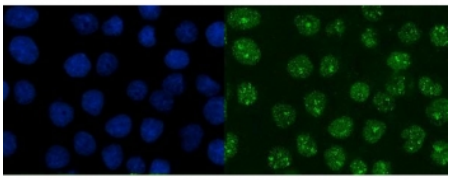
XRCC1 Antibody / X-ray repair cross-complementing protein 1 [clone 10E10.] (RQ7658)

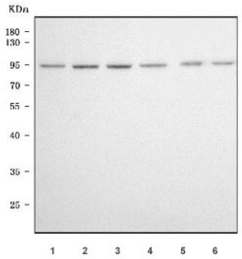
Catalog No.	Formulation	Size
RQ7658	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

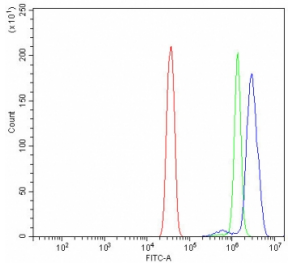
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	10E10.
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P18887
Localization	Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This XRCC1 antibody is available for research use only.



Immunofluorescent staining of FFPE human A431 cells with XRCC1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) 293T, 3) K562, 4) Jurkat, 5) HEL and 6) A431 cell lysate with XRCC1 antibody. Rountinely observed molecular weight: 69~90 kDa.



Flow cytometry testing of human HeLa cells with XRCC1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= XRCC1 antibody.

Description

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 meiogenesis 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.

Application Notes

Optimal dilution of the XRCC1 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids E538-A633) was used as the immunogen for the XRCC1 antibody.

Storage

After reconstitution, the XRCC1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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