

XRCC1 Rabbit mAb

Catalog No: #49513

Package Size: #49513-1 50ul #49513-2 100ul

Description

Product Name	XRCC1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	JA11-47
Purification	ProA affinity purified
Applications	WB, IHC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	DNA repair protein XRCC1 antibody RCC antibody X ray repair complementing defective repair in chinese hamster antibody X ray Repair Complementing Defective Repair in Chinese Hamster Cells antibody X ray repair complementing defective repair in chinese hamster cells 1 antibody X ray repair cross complementing 1 antibody X ray repair cross complementing protein 1 antibody X ray repair, complementing defective, repair in Chinese hamster antibody X ray repair cross-complementing protein 1 antibody XRCC 1 antibody Xrcc1 antibody XRCC1_HUMAN antibody
Accession No.	Swiss-Prot#:P18887
Calculated MW	100/70 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

WB: 1:500-1:2,000 IHC: 1:50-1:200

Background

The x-ray repair cross-complementing (XRCC) proteins are responsible for efficiently repairing and maintaining genetic stability following DNA base damage. These genes share sequence similarity with the yeast DNA repair protein Rad5. XRCC1 is a protein that facilitates the DNA base excision repair pathway by interacting with DNA ligase III and DNA polymerase to repair DNA single-strand breaks. XRCC2 and XRCC3 are both involved in maintaining chromosome stability during cell division. XRCC2 is required for efficient repair of DNA double-strand breaks by homologous recombination between sister chromatids, and XRCC3 interacts directly with Rad51 to cooperate with Rad51 during recombinational repair. XRCC4 is an accessory factor of DNA ligase IV that preferentially binds DNA with nicks or broken ends. XRCC4 binds to DNA ligase IV and enhances its joining activity, and it is also involved in V(D)J recombination. Any defect in one of the known components of the DNA repair/V(D)J recombination machinery (Ku-70, Ku-80, DNA-PKCS, XRCC4 and DNA ligase IV) leads to abortion of the V(D)J rearrangement process and early block in both T and B cell maturation.

References

Note: This product is for in vitro research use only and is not intended for use in humans or animals.