

XRCC1 (X-Ray Repair Cross Complementing Protein1) Ab-3 (Clone 144)
Mouse Monoclonal Antibody

Cat. #MS-1393-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)

Cat. #MS-1393-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #MS-1393-R7 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

Cat. #MS-1393-PCS (5 Slides) (Positive Control for Histology)

Cat. #MS-1393-PCL (0.1ml) (Positive Control for Western Blot)

Description X-Ray Repair Cross Complementing (XRCC1) plays a role in excision repair of DNA after ionizing irradiation. XRCC1 binds to DNA ligase III through the C-terminal 96 amino acids and to DNA polymerase beta through the N-terminal half. In testis XRCC1 is expressed at high levels. Cells with a mutation of this gene exhibit decreased single strand break repair and reduced recombination repair. They show increased double strand breaks, and sister chromatid exchange is increased up to 10-fold. The XRCC1 might serve as a scaffold protein during base excision-repair.

Mol. Wt. of Antigen: 85kDa

Epitope: Not determined

Species Reactivity: Human. Others-not known.

Clone Designation: 144

Ig Isotype / Light Chain: IgG_{2a}/ κ

Immunogen: Recombinant human XRCC1 protein.

Applications and Suggested Dilutions:

- Immunoprecipitation (Denatured verified) (Use Protein A) (Ab 2µg/mg protein lysate)
- Western Blotting (Ab 1-2µg/ml for 2hrs at RT)
- Immunohistology (formalin/paraffin) (Use Ab at 2-4µg/ml for 30 min at RT)
- * [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 10mM citrate buffer, pH 6.0, (**NEOMARKERS'** Cat. #AP-9003), for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Ls174T, or HeLa cells. Normal testis.

Cellular Localization: Nuclear

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Supplied As:

200µg/ml of antibody purified from ascites fluid by Protein A chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml,

or

Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Suggested References:

1. Cappelli E; et al. J Bio Chem, 1997, 272:23970-5.
2. Labudova O; et al. Pediatric Research, 1997, 41:435-9.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only**Additional Suggested References:**

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