

PRODUCT DATA SHEET

Product: Anti-XRCC1 mAb, clone 33-2-5

Cat. No.: MC-343 (100 µg)

Background:

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 the 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.

Specificity:

This clone recognizes a protein of approximately 85 kDa identified as the XRCC1.

Cellular Localization:

Nuclear

Species Reactivity:

Human and rat. Others not tested.

Ig Isotype:

Mouse IgG_{2b}

Immunogen:

Recombinant human XRCC1 protein.

Molecular Weight of Antigen:

85 kDa

Epitope:

Not Determined

Format:

100 µg of monoclonal antibody at 200 µg/mL in 10 mM PBS, pH 7.4, protein stabilizer and 0.09% sodium azide. Purified from ascites fluid by Protein A chromatography.

Storage:

Store at 4 °C

Positive Controls:

LS174T, HT29 and HeLa cells. Normal testis.

Applications and Suggested Dilutions:

- Immunoprecipitation: (Native verified) Use Protein A. Use antibody at 2 µg/mg protein lysate.
- Immunohistochemistry: (Formalin/paraffin) Use antibody at 1-2 µg/mL for 30 min. at RT. [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 min.]
- Western blot: Use antibody at 1-2 µg/mL for 2 hrs. at RT.

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

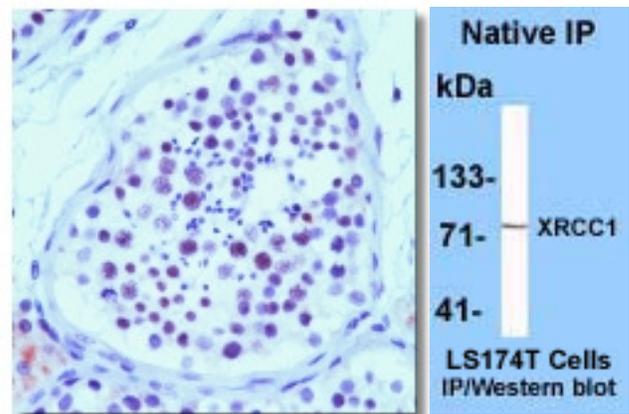


Figure: Formalin-fixed, paraffin embedded human testis stained with MC-343.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.