

PRODUCT DATA SHEET

Product: Anti-Rad51 mAb, clone 51RAD01

Cat. No.: MC-157 (100 µg)

Background:

Rad51 (a eukaryotic homologue of *Escherichia coli* RecA) is similar to RecA, both biochemically and structurally: It promotes homologous pairing and strand exchange within a regular nucleoprotein filament. In yeast, the Rad51 family of related proteins also includes Rad55, Rad57 and Dmc1. In mammalian cells, seven genes in this family have been identified (HsRAD51, XRCC2, XRCC3, RAD51B/hREC2, HsDMC1, RAD51C and RAD51D). Recent studies suggested that Rad51 is involved in cell proliferation regulation as well as homologous recombination.

Cellular Localization:

Nuclear

Species Reactivity:

Human, mouse and rat. Others not tested.

Ig Isotype:

Mouse IgG₁/κ

Immunogen:

Recombinant Rad51 protein.

Mol. Wt. of Antigen:

37-43 kDa

Epitope:

Not determined.

Format:

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

Storage:

Store at 4 °C.

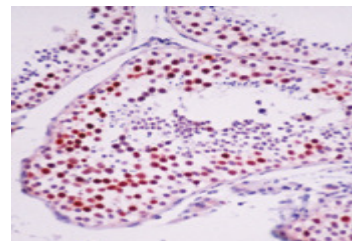
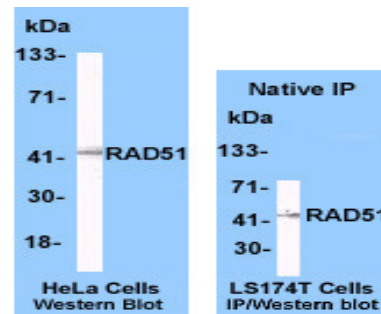
Positive Control:

HeLa cells. Testis.

Applications and Suggested Dilutions:

- Western blot: Use antibody at 1-2 µg/mL for 2 hrs. at RT.
- Immunohistochemistry: (Formalin/paraffin) Use antibody at 2-4 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.]
- Immunoprecipitation: (Native verified) Use antibody at 2 µg/mg protein lysate, use Protein G.

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



Formalin-fixed, paraffin-embedded human testis stained with 51RAD01 using peroxidase-conjugate and AEC chromogen. Note nuclear staining of germ cells.

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.