

PRODUCT DATA SHEET

Product: Anti-DNA-PKcs mAb, clone 18-2

Cat. No.: MC-361 (100 µg)

Background:

DNA-PKcs (DNA-dependent protein kinase) phosphorylates certain transcription factors including Sp1, Oct-1, p53, and SV40 large T antigen *in vitro*. *In vivo*, it is involved in repairing double strand DNA breaks.

Specificity:

Reacts with the 460 kDa catalytic subunit of DNA-dependent Protein Kinase (DNA-PKcs). Inhibits kinase activity of DNA-PKcs ~50%, but preincubation of enzyme with DNA protects DNA-PKcs from inactivation by clone 18-2. In Western blot, clone 18-2 reacts with intact DNA-PKcs as well as its degradation products.

Positive Control:

LS174T cells, Tonsil

Cellular Localization:

Nuclear

Epitope:

aa 1-2713

Species Reactivity:

Human and rat, others not tested.

Ig Isotype:

Mouse IgG₁

Immunogen:

Human DNA-dependent Protein Kinase purified from HeLa cells

Format:

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

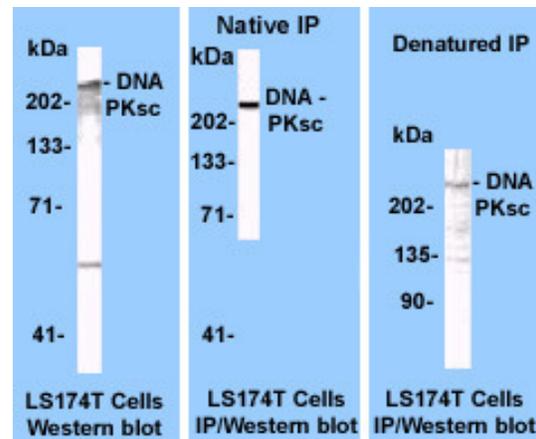
Storage:

Store at 4°C.

Applications and Suggested Dilutions:

- Functional Activity: Inhibits (50%) DNA-dependent Phosphorylation
- Immunofluorescence
- Western blot: 1-2 µg/mL for 2 hrs. at RT.
- Immunohistochemistry
Formalin/paraffin: Use at a 1:50-100 dilution 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 and denatured)
(Use protein G; Ab at 2 µg/mg protein lysate)

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



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.