

PRODUCT DATA SHEET

Product: Anti-Ku (p70) mAb, clone N3H10

Cat. No.: MC-351 (100 µg)

Background:

The Ku autoantigen is a heterodimer of 70 kDa (p70) and ~80 kDa (p80) proteins. The p70/p80 dimer is important for the function of a 460 kDa DNA-dependent protein kinase that phosphorylates certain transcription factors, including Sp1, Oct-1, p53 and SV40 large T antigen *in vitro*. Ku protein plays a role in cell signaling, proliferation, DNA repair, replication, transcriptional activation and apoptosis.

Specificity:

Reacts with the p70 Ku antigen subunit. Recognizes an epitope between aa 506-541 of p70.

Species Reactivity:

Human, monkey and *Xenopus*. Mouse and hamster (Western blots only). Does not react with bovine, rabbit or sea urchin. Other species not tested.

Cellular Localization:

Nuclear

Positive Control:

BT474, T47D, HEP-G-2 or HeLa cells. Tonsil.

Ig Isotype:

Mouse IgG_{2b}

Immunogen:

Human placental extract designated as PSE1-PL.

Format:

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

Storage:

Store at 4 °C.

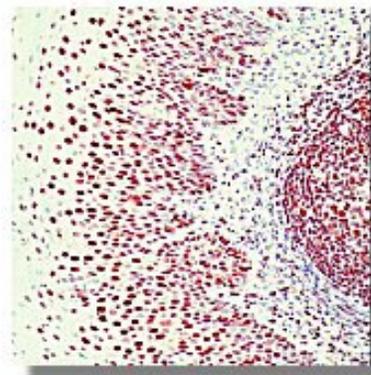
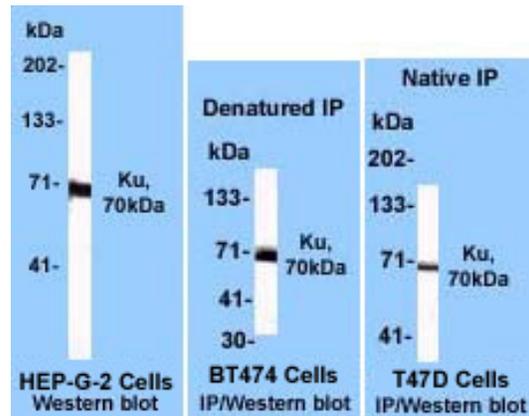
Applications and Suggested Dilutions:

- Immunofluorescence
- Immunohistochemistry: (Formalin/paraffin)
Use at a 1:200 - 1:400 dilution for 20 minutes

at room temperature (RT). Staining of formalin-fixed tissues is improved by boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min. followed by cooling to RT for 20 min.

- Immunoprecipitation: (Native and denatured)
Use at 2 µg/mg protein lysate. Use Protein A.
- Western blot: Use at 0.25-0.5 µg/mL for 2 hrs. at RT.

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



Formalin-fixed, paraffin-embedded tonsil stained with MC-351.

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.