



PRODUCT DATA SHEET

Product: Anti-Thymine Dimer, HRP-labeled, clone KTM53

Cat. No.: MC-068 (10 µg)

Synonyms:

Cyclobutane pyrimidine dimer (CPD)

Background:

Horseradish peroxidase labeled monoclonal antibody that recognizes thymine dimers in DNA. Labeling ratio (antibody:horseradish peroxidase) = 1:2-1:4.

Specificity:

Reacts specifically with thymine dimers in double- or single-stranded DNA produced by UV irradiation. Does not react with (6-4) photo products.

Ig Isotype:

Mouse IgG₁

Immunogen:

UV-irradiated salmon sperm DNA

Hybridoma:

Mouse myeloma (P3/X63-Ag8) x immunized mouse (Balb/c) splenocytes.

Format:

100 µL of 100 µg/mL HRP-labeled antibody in PBS, purified by Protein A chromatography. Unlabeled antibody and peroxidase were removed by gel filtration.

Storage:

Store at -20°C. Aliquot to avoid freeze/thaws.

Applications and Suggested Dilutions:

- *In Situ* Hybridization: Use at a 1:40 to 1:80 dilution. The dilution factor depends on the application. Frozen sections of fixed tissue or formalin-fixed, paraffin-embedded sections are recommended.
- Southern, Northern, and Dot blot: For the detection of thymine dimers in UV-damaged DNA and thymine-dimerized DNA probes. (Reported to work, but no data is available)

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.