PRODUCT DATA SHEET

Product: Anti-BPDE-DNA, clone 5D11

Cat. No.: **MC-397 (1 mL)**

Synonyms:
BPDE (Benzo[a]pyrenediol epoxide)

Description:
A number of chemicals, included polycyclic aromatic hydrocarbons (PAHs), have been shown to bind to DNA. This DNA damage can occur both early and late in the malignant process, thereby acting as an initiator and assisting in the progression of tumors. PAHs are released into the environment following incomplete combustion of organic materials. The most common sources of PAHs are from smoking and from consuming broiled and grilled foods. Human exposure to PAHs comes from various occupational, environmental, dietary and medicinal sources. Benzo[a]pyrene is a representative PAH. Antibodies to benzo[a]pyrenediol epoxide modified DNA (BPDE-DNA) can be used to identify polycyclic aromatic hydrocarbon (PAH)-DNA adducts. Exposure to this group of compounds is believed to be carcinogenic.

Specificity:
Recognizes only BPDE-I-DNA (PAH-DNA).

Ig Isotype:
Mouse IgG_{2a}

Format:
1 mL of 0.2 µm sterile filtered antibody in PBS at 100 µg/mL with 0.02% sodium azide and protein stabilizer.

Storage:
Store at 4°C.

Applications and Suggested Dilutions:
- Immuno purification
- Immuno assays as a detector
- Immunohistochemistry: Frozen and paraffin embedded tissue. Dilution depends on detection system applied. The typical starting working dilution is a 1:10 dilution.

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.