

AM26348PU-N**Monoclonal Antibody to Benzo(a)pyrenediol-epoxide (BPDE) - Purified****Alternate names:** PAH, polycyclic aromatic hydrocarbon**Quantity:** 0.1 mg**Concentration:** 0.1 mg/ml**Background:** A number of chemicals, including 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 or 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.**Host / Isotype:** Mouse / IgG1**Recommended Isotype Controls:** AM03095PU-N**Clone:** 8E11**Format:** **State:** Liquid 0.2 µm filtered Ig fraction
Purification: Protein G
Buffer System: PBS
Preservatives: 0.02% sodium azide
Stabilizers: 0.1% bovine serum albumin**Applications:** Immunoassays (detector).
Useful for Immunopurification.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.**Specificity:** The monoclonal antibody 8E11 recognizes free BPDE and DNA adducts.**Storage:** Store at 2 - 8 °C.
Shelf life: one year from despatch.**General Readings:**

1. Santella RM, Gammon MD, Zhang YJ, Motykiewicz G, Young TL, Hayes SC, et al. Immunohistochemical analysis of polycyclic aromatic hydrocarbon-DNA adducts in breast tumor tissue. *Cancer Lett.* 2000 Jun 30;154(2):143-9. PubMed PMID: 10806302.
2. Mumford JL, Williams K, Wilcosky TC, Everson RB, Young TL, Santella RM. A sensitive color ELISA for detecting polycyclic aromatic hydrocarbon-DNA adducts in human tissues. *Mutat Res.* 1996 Apr 4;359(3):171-7. PubMed PMID: 8618549.
3. Santella, R et al; Monoclonal antibodies to DNA modified by benzo[a]pyrene diol epoxide. *Carcinogenesis* 1984, 5: 373.