

**MONOCLONAL ANTIBODY TO  
BENZO[A]PYRENE DIOL-EPOXIDE MODIFIED DNA  
(BPDE-DNA)  
clone 5D11**



<b>Catalog nr</b>	HM5007 (lot number and expiry date are indicated on the label)
<b>Description</b>	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. The monoclonal antibody 5D11 recognizes only BPDE-I-DNA (PAH-DNA).
<b>Species</b>	Mouse IgG <sub>2a</sub>
<b>Formulation</b>	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.02% sodium azide and 0.1% bovine serum albumin.
<b>Application</b>	The monoclonal antibody 5D11 can be used for immuno purification and for immuno assays as detector. Furthermore 5D11 is useful for immunohistology on frozen and paraffin embedded tissue.
<b>Use</b>	For immunohistology dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.
<b>Storage and stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.
<b>Precautions</b>	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result with the use of or derivation of this product.
<b>References</b>	<ol style="list-style-type: none"><li>1. Santella, R et al; Immunohistochemical analysis of polycyclic aromatic hydrocarbon-DNA adducts in breast tumor tissue. <i>Cancer Lett</i> 2000, <i>154</i>: 143</li><li>2. Mumford, J et al; A sensitive ELISA for detecting polycyclic aromatic hydrocarbon-DNA adducts in human tissue. <i>Mutu Res</i> 1996, <i>359</i>: 171</li><li>3. Santella, R et al; Monoclonal antibodies to DNA modified by benzo[a]pyrene diol epoxide. <i>Carcinogenesis</i> 1984, <i>5</i>: 373</li></ol>
<b>Also available</b>	HM5008            Monoclonal antibody against BPDE, clone 8E11