

## **CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

Product name	BPDE, clone 8E11					
Catalog number	HM5008-20UG					
Lot number	-	Expiry date	-			
Volume	200 μΙ	Amount	20 µg			
Formulation	0.2 $\mu m$ filtered in PBS+0.1%BSA+0.02%NaN3	Concentration	100 µg/ml			
Host Species	Mouse IgG1	Conjugate	None			
Endotoxin	N.A.	Purification	Protein G			
Storage	4°C					

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes						•	•	
No								
N.D.	•	•	•	•	•			•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

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 1:50.

IA: HM5008 can be used as a detector.

## **General Information**

Description	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 representitive 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 8E11 recognizes free BPDE and DNA adducts.				
Aliases	Bezo[A]pyrenediol-epoxide				
References	<ol> <li>Santella, R et al; Immunohistochemical analysis of polycyclic aromatic hydrocarbon-DNA adducts in breast tumor tissue. Cancer Lett 2000, <i>154</i>: 143</li> <li>Mumford, J et al; A sensitive ELISA for detecting polycyclic aromatic hydrocarbon-DNA adducts in human tissue. Mutu Res 1996, <i>359</i>: 171</li> <li>Santella, R et al; Monoclonal antibodies to DNA modified by benzo[a]pyrene diol epoxide. Carcinogenesis 1984, <i>5</i>: 373</li> </ol>				
Storage&stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.				
Precautions	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 from the use or derivation of this product.				

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Brenda Teunissen

Date 13/01/2021

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.