

TREVIGEN® Product Data

For Research Use Only. Not For Use In Diagnostic Procedures

Anti-BPDE (Clone 8E11) Benzo[a]pyrene diol epoxide

Catalog #: 4360-MC-100

Size: 100 µg

Description: The antibody recognizes both free polycyclic aromatic hydrocarbons (PAHs) and DNA adducts. In an inhibition assay, the binding of the antibody to BPDE adducts was inhibited by BPDE-I-DNA, BPDE-I-dG, BPDE-I tetraol but not by BPDE-II-DNA¹.

Immunogen: The antibody was raised against BPDE-I-G coupled to BSA.

Physical state: This antibody is provided from mouse ascites, provided at 1 mg/ml in PBS, 0.01% sodium azide.

Ig Class: IgG₁/κ

Storage Conditions: Stored at 4°C. For long term storage, freeze in working aliquots at -20°C in a manual defrost freezer to avoid repeated freeze-thawings.

Applications: Competitive ELISA and immunoprecipitation. The antibody may be used to investigate exposure to environmental and occupational pollutants. PAHs are released into the environment following incomplete combustion of organic materials. Human exposure to PAHs comes from various occupational, environmental, dietary and medicinal sources. Exposure to this group of compounds is believed to be carcinogenic.

References:

1. Santella, R.M., C.D. Lin, W. L. Cleveland, and I.B. Weinstein. 1984. Monoclonal antibodies to DNA modified by a benzo[a]pyrene diol epoxide. *Carcinogenesis* 5:373-377.
2. Lee, B.M. and R. Santella. 1988. Quantitation of protein adducts as a marker of genotoxic exposure: immunologic detection of benzo[a]pyrene-globin adducts in mice. *Carcinogenesis* 9:1773-1777.
3. Strickland, P.T., D. Kang, E.D. Bowman, A. Fitzwilliam, T.E. Downing, N. Rothman, J.D. Groopman, and A. Weston. 1994. Identification of 1-hydroxypyrene glucuronide as a major pyrene metabolite in human urine by synchronous fluorescence spectroscopy and gas chromatography-mass spectrometry. *Carcinogenesis* 15:483-487.
4. Kang, D.H., N. Rothman, M.C. Poirier, A. Greenberg, C.H. Hsu, B.S. Schwartz, M.E. Baser, J.D. Groopman, A. Weston, and P.T. Strickland. 1995. Interindividual differences in the concentration of 1-hydroxypyrene-glucuronide in urine and polycyclic aromatic hydrocarbon-DNA adducts in peripheral white blood cells after charbroiled beef consumption. *Carcinogenesis* 16:1079-1085.
5. Kang, D.H., N. Rothman, S.-H. Cho, H.S. Lim, H.-J. Kwon, S.-M. Kim, B. Schwartz, and P.T. Strickland. 1995. Association of exposure to polycyclic aromatic hydrocarbons (estimated from job category) with concentration of 1-hydroxypyrene glucuronide in urine from workers at a steel plant. *Occupational and Environmental Medicine* 52:593-599.

Related Products:

Catalog #	Description	Size
2290-MC-100	Anti-Bcl-2 mAb (clone YTH-10C4)	100 µg
2291-MC-100	Anti-human-Bcl-2 mAb (clone YTH-8C8)	100 µg
4411-PC-100	Anti-Phosphorylated Histone H2AX polyclonal	100 µl
2300-MC-100	Anti-Bcl-X _L mAb (clone YTH-2H12)	100 µg
6361-PC-100	Anti-human/mouse-PBR polyclonal	100 µl
2281-MC-100	Anti-human-Bax mAb (clone YTH-6A7)	100 µg
4335-MC-100	Anti-PAR polymer mAb (10HA)	100 µl
4336-BPC-100	Anti-PAR polymer polyclonal	100 µl
4338-MC-50	Anti-human/murine-PARP mAb (clone C2-10)	50 µg

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Anti-BPDE

Catalog#: 4360-MC-100

Storage: 4°C

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