

PRODUCT INFORMATION

Monoclonal Antibody to 1,N⁶-Etheno-2-deoxyadenosine (EM A-1)

Cat. No. SQM009.1 (50 µg)

- Detects a specific mutagenic DNA modification induced by several exogenous and endogenous carcinogens e.g. food, smoking, cancer therapeutics, environmental carcinogens, workplace carcinogens
- Molecular epidemiology of carcinogen exposure
- Pre- and intratherapeutic dosimetry of exposure to anticancer agents
- Basic research of molecular mechanisms of carcinogenesis
- Mutagenicity testing of substances

Product Data

Catalogue No.:	SQM009.1
Product Name:	Monoclonal Antibody to 1,N ⁶ -etheno-2-deoxyadenosine
Product Size:	50 µg
Tested with:	human, rat
Clone:	EM A-1
Isotype:	mouse IgG2a
Formulation:	lyophilized
Reconstitution and Storage:	Store lyophilized product at -20°C until opened. After opening, restore with 0.5 ml PBS/NaN ₃ /1% BSA to a final concentration 100 µg/ml. After dilution, do not use for more than one day. For extended storage after reconstitution we suggest aliquoting and storage at -20°C
Immunogen:	1,N ⁶ -etheno-2-deoxyadenosine
Purification:	The antibody was isolated from supernatant by Protein G affinity purification
Tested Application:	Competitive Radioimmunoassay (RIA) Immunohistochemistry

Specificity of EM A-1 measured by the competitive radioimmunoassay (RIA)

Affinity constant for 1,N ⁶ -etheno-2`-deoxyadenosine	1.7 x 10 ⁹ (l/Mol)
<i>RIA-detection limit for</i>	<i>(pMol)</i>
EdAdo	0.187
EAdo	0.43
EAdc	10
EdCyd	91
ECyd	20
dGuo	2.2 x 10 ⁴
dAdo	7392
dIno	1814
dCyd	7.0 x 10 ⁵
dThd	9.7 x 10 ⁴
DNA-Hydrolysate	1.5 x 10 ⁴
DPyr	5.0 x 10 ⁵

References

1. Eberle et al. 1,N⁶-etheno-2'-deoxyadenosine and 3,N⁴-etheno-2'-deoxycytidine detected by monoclonal antibodies in lung and liver DNA of rats exposed to vinyl chloride. *Carcinogenesis* (1989); 10, 209-212.
2. Frank et al. Immunohistochemical detection of 1,N⁶-ethenodeoxyadenosine in nuclei of human liver affected by diseases predisposing to hepato-carcinogenesis. *Carcinogenesis* (2004); 25, 1027-1031.

Last updated: 12/2020