

## PRODUCT INFORMATION

Cat. No. SQM002.1 (50µg)

### **Monoclonal Antibody to O<sup>6</sup>-Ethyl-2-Deoxyguanosine (ER 17)**

- 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:	SQM002.1
Product Name:	Monoclonal Antibody to O <sup>6</sup> -ethyl-2-deoxyguanosine
Product Size:	50 µg
Tested with:	human, mouse, rat
Clone:	ER 17
Isotype:	rat IgM
Formulation:	lyophilized
Reconstitution and Storage:	Store lyophilized product at -20°C until opened. After opening, restore with 0.5 ml PBS/NaN <sub>3</sub> /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:	O <sup>6</sup> -ethyl-2-deoxyguanosine
Purification:	The antibody was isolated from supernatant by Protein G affinity purification
Tested Application:	Competitive Radioimmunoassay Immunocytochemistry: 0.05 – 0.2 µg/ml PBS containing 3% bovine serum albumin ELISA: 0.2 – 0.5 µg/ml PBS containing 3% bovine serum albumin

## Specificity of ER 17 measured by the competitive radioimmunoassay (RIA)

Affinity constant for O <sup>6</sup> -ethyldeoxyguanosine	2.2 x 10 <sup>10</sup> (l/Mol)
<i>RIA-detection limit for</i>	<i>(pMol)</i>
O <sup>6</sup> -EtdGuo	0.04
O <sup>6</sup> -EtGuo	0.82
O <sup>6</sup> -EtGua	4.3
O <sup>4</sup> -EtdThd	505
O <sup>2</sup> -EtdThd	1348
O <sup>6</sup> -MedGuo	1.7
O <sup>6</sup> -iProdGuo	0.24
O <sup>6</sup> -BudGuo	44
dGuo	3.4 x 10 <sup>4</sup>
dAdo	2.8 x 10 <sup>5</sup>
dIno	1.3 x 10 <sup>4</sup>
DNA-Hydrolysate	1.1 x 10 <sup>5</sup>

## References

1. Seiler et al. Quantification of specific DNA O-alkylation products in individual cells by monoclonal antibodies and digital imaging of intensified nuclear fluorescence. *Carcinogenesis* (1993); 9, 1907-1911.
2. Thomale et al. Repair of O<sup>6</sup>-alkylguanines in the nuclear DNA of human lymphocytes and leukemia cells: analysis at the single-cell level. *British Journal of Cancer* (1994); 69, 698-705.

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