

## PRODUCT INFORMATION

### **Monoclonal Antibody to O<sup>2</sup>-Ethyl-Deoxythymidine (EM 4-1)**

Cat. No. SQM015.1 (200 µg)

- Detects a specific mutagenic DNA modification induced by several exogenous and endogenous carcinogens e.g. food, smoking, cancer therapeutics, environmental carcinogens, workplace carcinogens.
- Usefull for molecular epidemiology due to accumulation of the O<sup>2</sup>-ethyl-deoxythymidine-adduct in the cellular DNA following 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:	SQM015.1
Product Name:	EM 4-1, Monoclonal Antibody to O <sup>2</sup> -ethyl-deoxythymidine
Product Size:	200 µg
Tested with:	human, mouse, rat
Clone:	EM 4-1
Isotype:	mouse IgG1
Formulation:	lyophilized
Reconstitution and Storage:	Store lyophilized product at -20°C until opened. After opening, restore with 1 ml PBS/NaN <sub>3</sub> /1% BSA to a final concentration of 200 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>2</sup> -ethyl-2-deoxythymidine
Purification:	The antibody was isolated from supernatant by Protein G affinity purification
Tested Application:	Competitive Radioimmunoassay Immunocytochemistry: 2.0 – 5.0 µg/ml PBS containing 3 % bovine serum albumin

### Specificity of EM 4-1, measured by the competitive radioimmunoassay (RIA)

Affinity constant for O <sup>2</sup> -ethyl-2-deoxythymidine	1.6 x 10 <sup>9</sup> (l/Mol)
<i>RIA-detection limit for</i>	<i>(pMol)</i>
O <sup>2</sup> -EtdThd	0.19
O <sup>2</sup> -EtdThy-ribosid	0.28
O <sup>2</sup> -MedThd	1.0
O <sup>2</sup> -BudThd	0.19
O <sup>4</sup> -EtdThd	9621
O <sup>6</sup> -EtdGuo	1.4x10 <sup>4</sup>
5-MedCyd	1.4x10 <sup>5</sup>
dThd	7.8x10 <sup>4</sup>
dCyd	1.4x10 <sup>5</sup>
DNA-Hydrolysate	2.3x10 <sup>5</sup>

Last updated: 12/2020