

PRODUCT INFORMATION

Monoclonal Antibody to 8-Oxo-2-deoxyguanosine (EM 8oxo-4)

Cat. No. SQM021.1 (100 µg)

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

Product Data

Product –ID:	SQM021.1
Product Name:	EM 8oxo-4, monoclonal antibody to 8-oxo-2-deoxyguanosine
Product Size:	100 µg
Monoclonal: Clone:	EM 8oxo-4
Monoclonal: Isotype	mouse IgG1
Formulation:	lyophilized
Reconstitution and storage:	Store lyophilized product at -20°C until opened. After opening, restore with 1.0 ml PBS/NaN ₃ /1% BSA to a final concentration of 100 µg mAb/ml. After dilution, do not use for more than one day. For extended storage after reconstitution we suggest aliquoting and storage at –20°C.
Purification:	The antibody was isolated from supernatant by Protein G affinity purification.
Tested Application:	Competitive Radioimmunoassay, ELISA. The antibody may not suitable for immunohisto-chemical staining.

Specificity of Mab EM 8oxo-4, measured by the competitive radioimmunoassay (RIA)

Affinity constant for 8-Oxo-2-deoxyguanosine:	8.4 x 10 ⁶ (l/Mol)
<i>Relative binding to :</i>	
8-Oxo-dG	1
8-Oxo-Guo	2.9
8-Oxo-Gua	35
O ⁶ -Me-9-Butyryl-8-Oxo-Gua	90
N ² -Aminopentyl-9-Et-8-Oxo-Gua	26
dGuo	763
Guo	>3.1 x 10 ³
6-SH-Guo	>3.1 x 10 ³
8-SH-Guo	0.6
Acyclovir	>3.1 x 10 ³
O ⁶ -Me-Guo	4.3 x 10 ⁴
O ⁶ -Me-dGuo	4.3 x 10 ⁴
Hypoxanthine	>3.1 x 10 ⁴
dA	>3.1 x 10 ⁴
dI	>3.1 x 10 ⁴
dC	>3.1 x 10 ⁴
dT	>3.1 x 10 ⁴
Ribose	>3.1 x 10 ⁵
2`-Deoxyribose	>3.1 x 10 ⁵

References

1. Lutze, C. Immunanalytische und chemisch-molekularbiologische Grundlagen der Detektion und Quantifizierung spezifischer DNA-Läsionen. PhD-Thesis, Cuvillier, Göttingen (1999)

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