

## Malondialdehyde, BSA-conjugated

DAG3366 chemosynthetic

Lot. No. (See product label)

### PRODUCT INFORMATION

<b>Product overview</b>	Malondialdehyde, BSA-conjugated
<b>Description</b>	Malondialdehyde, Conjugated
<b>Species</b>	chemosynthetic
<b>Specificity</b>	Malondialdehyde conjugated with bovine serum albumin (BSA).
<b>Conjugate</b>	BSA
<b>Form</b>	Lyophilized (1 mg); Lyophilized and reconstituted in deionized water (250 µg)
<b>Applications</b>	immunohistochemistry and immunocytochemistry
<b>Usage</b>	This antigen was used to produce a polyclonal antibody.
<b>Quality Control Test</b>	250 micrograms, 1 milligram

### PACKAGING

<b>Storage</b>	Store at -20°C for one year. Reconstitute with deionized H <sub>2</sub> O + 0.1% merthiolate (optional preservative). This solution is stable at +4°C for 15 days.
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### BACKGROUND

**Introduction** Malondialdehyde (MDA) is a natural product formed in all mammalian cells as a product of lipid peroxidation. MDA is a highly reactive three carbon dialdehyde produced as a byproduct of polyunsaturated fatty acid peroxidation and arachidonic acid metabolism. MDA readily combines with several functional groups on molecules including proteins, lipoproteins, and DNA. It reacts with DNA to form adducts to deoxyguanosine and deoxyadenosine. The major adduct to DNA is a pyrimidopurinone called M1G which appears to be a major endogenous DNA adduct in human beings that may contribute significantly to cancer linked to lifestyle and dietary factors. MDA modified proteins may show altered physico chemical behavior and antigenicity. MDA is toxic and has been implicated in aging mutagenesis, carcinogenesis, diabetic nephropathy and radiation damage. Increased expression of MDA has been reported in the brains of Alzheimer's patients. Antibodies to MDA will help to visualize the MDA adducts.

**Keywords** Malondialdehyde; MDA

### REFERENCES

1. Farmer EE, Davoine C (2007). "Reactive electrophile species". Curr. Opin. Plant Biol. 10 (4): 380–6.
2. Moore K, Roberts LJ (1998). "Measurement of lipid peroxidation". Free Radic. Res. 28 (6): 659–71.