Antibodies

Data Sheet

MALONDIALDEHYDE (MDA)

ANTIBODY, MONOCLONAL

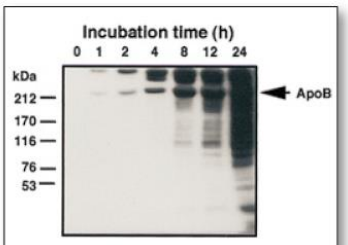
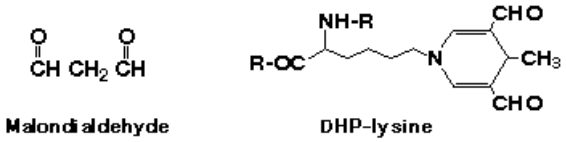


Figure 1: Western Blot analysis of MDA-LDL adduct formation. LDL (0.5 mg) was incubated with 1 mM MDA in 1 ml of 50 mM PBS (pH 7.2) at 37°C. LDL was separated by SDS-PAGE and immunoblotted with AA1011 (2 µg/ml). AA1011 does not react with native LDL apoB, whereas the MDA-modified LDL apoB shows intense immunoreactivity.

Yamada S et al. (2001) J Lipid Res 42(8): 1187-96.

Catalog no.:	AA1011.1
Immunogen:	Malondialdehyde (MDA)-modified KLH
Host:	Mouse
Clone no.:	1F83
Isotype:	$IgG_{2a\ lambda}$
Matrix:	Protein A purified, 10 mM PBS, 0.1% NaN_3, 0.5% BSA
Specificity:	MDA-modified proteins, especially dihydropyridine (DHP)-lysine type derivative



Malondialdehyde DHP-lysine

Contents:	30 µg (frozen; 100 µg/ml)
Known applications:	Western Blot (2 µg/ml)[1], immunohistochemistry (paraffin sections, 0.5-1.0 µg/ml; cryosections)[1], immunofluorescence[2]

This antibody has not been tested for use in all applications. This does not necessarily exclude its use in non-tested procedures. The stated dilutions are recommendations only. End users should determine optimal dilutions in their system using appropriate negative/positive controls.

Store at:	- 20 °C

Repeated thawing and freezing must be avoided

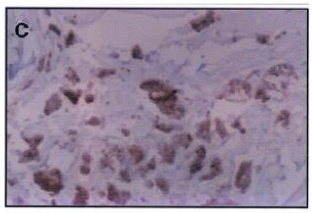


Figure 2: Immunohistochemistry image of dihydropyridine adduct staining in paraffin section of human atherosclerotic aorta. Endogenous peroxide activity was quenched by incubating the section for 10 min with 3% hydrogen peroxide. The section was incubated with AA1011 and detected using Vectastain ABC kit (Vector Laboratories). 3,3-diaminobenzidine tetrahydrochloride served as the chromogen. Sections were counterstained with hematoxylin. **C.** AA1011 stains the cytoplasm of most foamy or spindle macrophages. Original magnification: x100.

Yamada S et al. (2001) J Lipid Res 42(8): 1187-96.

References:

1. Yamada S, Kumazawa S, Ishii T, Nakayama T, Itakura K, Shibata N, Kobayashi M, Sakai K, Osawa T, Uchida K (2001). Immunochemical detection of a lipofuscin-like fluorophore derived from malondialdehyde and lysine. *J Lipid Res* **42**(8): 1187-1196.

2. Muratori, Monica, Lara Tamburrino, Sara Marchiani, Marta Cambi, Biagio Olivito, Chiara Azzari, Gianni Forti, and Elisabetta Baldi. (2015). Investigation on the Origin of Sperm DNA Fragmentation: Role of Apoptosis, Immaturity and Oxidative Stress. *Molecular Medicine* **21** (1): 109–22.

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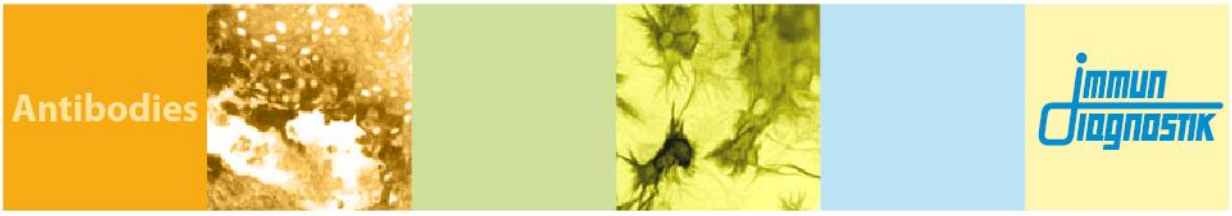

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For research use only

Publishing research using AA1011? Please let us know so that we can cite your publication as a reference.

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