

Data Sheet

ACROLEIN (ACR)

ANTIBODY, MONOCLONAL

Catalog no.: AA1018.1 / AA1018.2

Immunogen: ACR-modified KLH

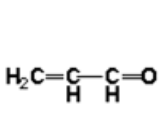
Host: Mouse Balb/c

Clone no.: 5F6

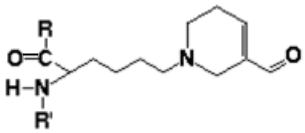
Isotype: $IgG_{1\ kappa}$

Matrix: Protein A purified, 10 mM PBS, 0.1% NaN_3, 0.5% BSA

Specificity: ACR-modified proteins, especially 3-formyl-3, 4-dehydropiperidino lysine (N^{α}-acetyl-FDP)-type derivatives



Acrolein



N ε -(3-formyl-3,4-dehydropiperidino)-lysine

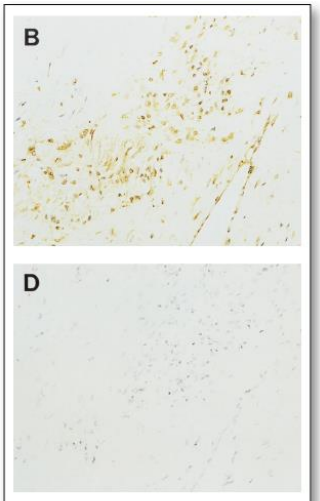


Figure 1: Immunohistochemistry image of acrolein adduct staining in paraffin sections of human atherosclerotic tissue. Antigen retrieval was performed with 0.5 mg/ml pronase (DAKO). The sections were incubated with AA1018 and detected using peroxidase-conjugated secondary antibody and 3,3'-diaminobenzidine solution containing 0.003% H_2O_2. **B.** AA1018 stains macrophage-derived foam cells positive for CD68 and the thickening neointima of arterial walls. **D.** Preadsorption by Nα-acetyl-FDP-lysine abolished the staining.
Uchida K et al. (1998) Proc Natl Acad Sci USA 95(9): 4882-4887

Contents: 20 µg / 100 µg (frozen; 100 µg/ml)

Known applications: ELISA[1], immunohistochemistry (paraffin sections, 0.5-1.0 µg/ml)[1]

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

References:

1. Uchida K, Kanematsu M, Sakai K, Matsuda T, Hattori N, Mizuno Y, Suzuki D, Miyata T, Noguchi N, Niki E, Osawa T (1998). Protein-bound acrolein: potential markers for oxidative stress. *Proc Natl Acad Sci USA* **95**(9)**:** 4882-4887.

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2. Noel Y. Calingasan, Koji Uchida, and Gary E.Gibson. (1999). Protein-bound acrolein: A novel markers of oxidativestress in Alzheimer's Disease. *Journal of Neurochemistry* **72**(2),751-756

Last updated on: 11 November 2021

For research use only

Publishing research using AA1018? Please let us know so that we can cite your publication as a reference.

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