

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

#### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in





# Anti-Acrolein-modified protein [5F6] Standard Size Ab03552-1.1

Isotype and Format: Mouse IgG1, Kappa

Clone Number: 5F6

Alternative Name(s) of Target: Acrolein modified protein; ACR-P; ACRL

**UniProt Accession Number of Target Protein:** 

Published Application(s): WB, ELISA, IHC

Published Species Reactivity: Species independent

Immunogen: The original antibody was generated by immunizing BALB/c mice with an acrolein-treated

keyhole limpet hemocyanin (KLH).

**Specificity:** This antibody is specific for acrolein-modified proteins. Protein modification by acrolein is largely attributed to the formation of acrolein-lysine and acrolein-histidine adducts that possess a carbonyl function. While the antibody has been raised against acrolein-modified KLH, it has been shown to recognize both acrolein-modified BSA and oxidized LDL.

**Application Notes:** A direct ELISA examined the immunoreactivity of this antibody to aldehyde-treated proteins. It was scarcely inhibited by  $N^a$ -acetyl- $N^{im}$ -propanal-histidine and significantly inhibited by  $N^a$ -acetyl-FDP-lysine, indicating that FDP-lysine ( $N^\epsilon$ -(3-formyl-3,4-dehydropiperidino)lysine) is an epitope. This antibody was also used for immunohistochemistry (IHC) detection of protein-bound acrolein in fatty streak lesions of arterial tissue (Uchida et al., 1998; PMID: 9560197). This antibody was used in flow cytometry (FC) to detect protein-bound acrolein in activated human T cells (Fonseca et al., 2001; PMID: 11342443). A novel pyridinium-type lysine adduct,  $N^\epsilon$ -(3-methyl-pyridinium)lysine (MP-lysine), was investigated and found to be a major epitope of this antibody (Furuhata et al., 2003; PMID: 14504272). This antibody was used for IHC to detect oxidative stress in the testis of rats (luchi et al., 2004; PMID: 14673659). This antibody was used for WB to detect acrolein modification of apoE3-NT (Tamamizu-Kato et al., 2007; PMID: 17580963).

**Antibody First Published in:** Uchida et al. Protein-bound acrolein: potential markers for oxidative stress. Proc Natl Acad Sci USA. 1998 Apr 28;95(9):4882-7. doi: 10.1073/pnas.95.9.4882 PMID:9560197 **Note on publication:** The original publication describes the development of the antibody, which recognizes protein-bound acrolein, a potential marker of oxidative stress and long-term protein damage in aging, atherosclerosis, and diabetes.

#### **Product Form**

**Size:** 100 μg Purified antibody.

**Purification:** Protein A affinity purified **Supplied In:** PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.