

PRODUCT INFORMATION



4-hydroxy Nonenal-BSA

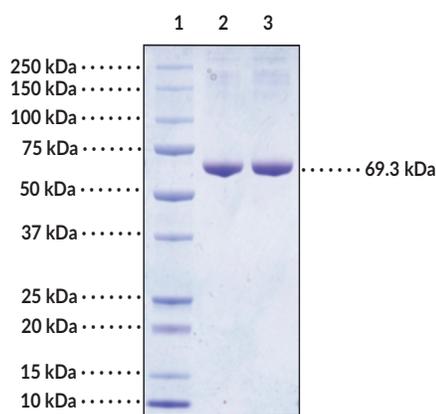
Item No. 44081

Overview and Properties

Synonyms: 4-HNE-Bovine Serum Albumin, 4-HNE-BSA, 4-hydroxy Nonenal-Bovine Serum Albumin
Source: Albumin isolated from bovine plasma and modified with 4-HNE
Molecular Weight: 69.3 kDa
Storage: -20°C (as supplied)
Stability: ≥1 year
Purity: ≥85% estimated by SDS-PAGE
Supplied in: PBS, pH 7.4

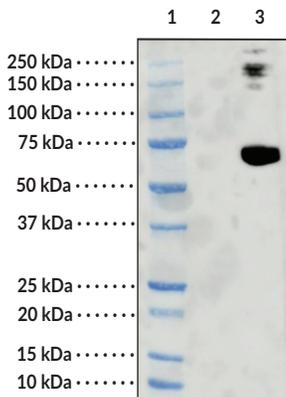
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Images



Lane 1: MW Markers
Lane 2: BSA (2 μg)
Lane 3: 4-HNE-BSA (2 μg)

SDS-PAGE Analysis of 4-HNE-BSA.



Lane 1: MW Markers
Lane 2: BSA (2 μg)
Lane 3: 4-HNE-BSA (2 μg)

Western Blot Analysis of 4-HNE-BSA.

Protein samples were incubated with 4-hydroxy Nonenal [HNEJ-1] Monoclonal Antibody (Clone IG10) (Item No. 38404), then probed with Goat Anti-Mouse IgG HRP (Item No. 10004302) at a 1:5,000 dilution.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

4-hydroxy Nonenal (4-HNE) is a lipid peroxidation product derived from oxidized ω -6 polyunsaturated fatty acids, such as arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607).^{1,2} It is widely used as a marker of lipid peroxidation.² 4-HNE (Item No. 32100) exhibits various biological activities such as cytotoxicity, growth inhibiting activity, genotoxicity, and chemotactic activity.¹⁻³ It inhibits pro-oxidant-induced Ca^{2+} release from mitochondria at 10-50 μM .² This product contains 4-HNE-modified bovine serum albumin.

References

1. Pryor, W.A. and Porter, N.A. Suggested mechanisms for the production of 4-hydroxy-2-nonenal from the autoxidation of polyunsaturated fatty acids. *Free Radic. Biol. Med.* **8(6)**, 541-543 (1990).
2. Esterbauer, H., Schaur, R.J., and Zollner, H. Chemistry and biochemistry of 4-hydroxynonenal, malonaldehyde, and related aldehydes. *Free Radic. Biol. Med.* **11(1)**, 81-128 (1991).
3. Sodem, R.S. and Chung, F.L. 1,*N*²-ethenodeoxyguanosine as a potential marker for DNA adduct formation by *trans*-4-hydroxy-2-nonenal. *Cancer Res.* **48(2)**, 320-323 (1988).

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