

Datasheet: AHP1251

Description:	GOAT ANTI 4-HYDROXYNONENAL
Specificity:	4-HYDROXYNONENAL
Format:	Serum
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/10000
Immunoprecipitation			▪	
Western Blotting	▪			1/3000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Broad
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Product Form	Serum - liquid
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Antiserum Preparation	Antisera to 4-hydroxynonenal were raised by repeated immunisations of goats with highly purified antigen.
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Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
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Immunogen	4-hydroxynonenal conjugate.
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RRID	AB_877436
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Specificity	Goat anti 4-hydroxynonenal antibody recognises 4-hydroxynonenal (HNE). HNE is a
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~65 kDa, highly reactive aldehyde released upon oxidation of omega-6-insaturated fatty acids, often by free radicals. HNE acts to spread and increase the initial effects of free radical events. It binds nucleic acids, phospholipids and sulfhydryl, histidine and lysine groups. These conjugates cause the cytotoxic effects (including cell death) that occur during oxidative stress due to hydrogen peroxide, superoxide, UV, heat and oxidant chemicals. HNE plays a role in the pathogenesis of diseases, stimulating fibrogenesis and inflammation. It is thought to act as a sensor of external stimuli, inducing the stress response by modulating membrane receptors such as Epidermal growth factor receptor or Fas.

It is thought that constitutive levels of HNE may be needed for normal cell functions as decreased HNE levels are associated with cell proliferation and increased HNE levels with elevated apoptosis.

Further Reading	1. Boon, P. <i>et al.</i> (1999) Glutathione Conjugation of 4-Hydroxy-trans-2,3-nonenal in the Rat in Vivo, the Isolated Perfused Liver and Erythrocytes. Toxicol. Appl. Pharmacol. 159:214-23. 2. Dwivedi S, <i>et al.</i> (2007) Role of 4-hydroxynonenal and its metabolites in signaling. Redox. Rep. 12:4-10.
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Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
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Guarantee	18 months from date of despatch.
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Health And Safety Information	Material Safety Datasheet documentation #20362 available at: 20362: https://www.bio-rad-antibodies.com/uploads/MSDS/20362.pdf
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Rabbit Anti Goat IgG (Fc) (STAR122...) [FITC](#), [HRP](#)

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