

For Research Use Only

# Na 4-Hydroxynonenal Monoclonal antibody, PBS Only



Catalog Number: 68538-1-PBS

## Basic Information

Catalog Number:

68538-1-PBS

Size:

1mg/ml

Source:

Mouse

Isotype:

IgG2a

GenBank Accession Number:

GeneID (NCBI):

Full Name:

Purification Method:

Protein A purification

CloneNo.:

2C1D10

## Applications

Tested Applications:

ELISA, Indirect ELISA

Species Specificity:

4-hydroxynonenal, chemical compound

## Background Information

4-Hydroxynonenal is a uremic toxin. Uremic toxins can be subdivided into three major groups based upon their chemical and physical characteristics: 1) small, water-soluble, non-protein-bound compounds, such as urea; 2) small, lipid-soluble and/or protein-bound compounds, such as the phenols and 3) larger so-called middle-molecules, such as beta2-microglobulin. 4-Hydroxynonenal (4-HNE) is a major aldehydic product of  $\omega$ -6-unsaturated fatty acid peroxidation. It is considered a lipid peroxidation specific marker. 4-HNE has been found to induce differentiation and inhibit proliferation of HL-60 human leukemic cells. It has also been found to induce murine alveolar macrophage cell death. 4-HNE has been shown to inhibit State 3 respiration, causing a transient cytosolic Ca<sup>2+</sup> increase. In addition, it irreversibly inhibits Na<sup>+</sup>-K<sup>+</sup>-ATPase activity.

## Storage

Storage:

Store at -80°C.

**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

Storage Buffer:

PBS Only

For technical support and original validation data for this product please contact:

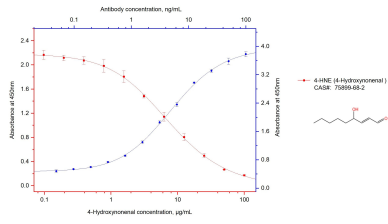
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

## Selected Validation Data



Indirect ELISA was performed by coating BSA conjugated 4-Hydroxynonenal (4-HNE) at ~20 ng/well (by 4-HNE amount), followed by blocking with 1% BSA. Serial diluted 4-Hydroxynonenal antibody 68538-1lg was added to the plates and incubated at 37 °C. HRP-Goat anti-mouse was used for detection (top X-right Y, blue curve). Competitive ELISA was performed similarly except that different concentration of 4-Hydroxynonenal was mixed in 5 ng/mL primary antibody (bottom

