



# Anti-4-Hydroxynonenal monoclonal antibody, clone IOFK-3 (DMAB15631)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Mouse Anti-4-HNE Monoclonal Antibody
<b>Specificity</b>	This antibody shows almost negligible reactivity With proteins that were treated with other aldehydes such as: 2-nonenal, 2-hexenal, 1-hexenal, 4-hydroxy-2-hexenal, formaldehyde or glutaraldehyde.
<b>Target</b>	4-HNE
<b>Immunogen</b>	4-HNE-modified conjugated with KLH.
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	N/A
<b>Clone</b>	IOFK-3
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IHC
<b>Format</b>	Lyophilized
<b>Buffer</b>	Lyophilized from 50 mM TBS (1% BSA)
<b>Preservative</b>	None
<b>Storage</b>	Store at 4°C on dry atmosphere.After reconstitution with deionized water, store at -20°C or lower.Aliquot to avoid repeated freezing and thawing.

## BACKGROUND

**Introduction**

4-Hydroxynonenal, or 4-hydroxy-2-nonenal or 4-HNE or HNE, (C<sub>9</sub>H<sub>16</sub>O<sub>2</sub>), is an alpha,beta-unsaturated hydroxyalkenal which is produced by lipid peroxidation in cells. 4-HNE is the primary alpha,beta-unsaturated hydroxyalkenal formed in this process. 4-HNE has 4 reactive groups: an aldehyde, a double-bond at carbon 2, and a hydroxy group at carbon 4. It is found throughout animal tissues, and in higher quantities during oxidative stress due to the increase in the lipid peroxidation chain reaction, due to the increase in stress events. 4-HNE has been hypothesized by several researchers to play a key role in cell signal transduction, in a variety of pathways from cell cycle events to cellular adhesion.

**Keywords**

4-Hydroxynonenal; 4-hydroxy-2-nonenal; Mouse Anti-4-HNE Monoclonal Antibody; Anti-4-HNE Monoclonal Antibody; 4-HNE Monoclonal Antibody Mouse Anti-4-HNE MAb; Anti-4-HNE MAb; 4-HNE MAb; Mouse Anti-4-HNE Antibody; Anti-4-HNE Antibody; 4-HNE Antibody