

4-HNE (P-16): sc-130083

BACKGROUND

4-HNE (4-hydroxynonenal) is an α -, β -unsaturated hydroxyalkenal that has three reactive groups (a hydroxy group, an aldehyde and a double bond) and is formed during lipid peroxidation. Present in normal levels throughout the body and at higher levels during oxidative stress, 4-HNE plays key roles in signal transduction pathways, cellular adhesion and numerous cell cycle events. While lower levels of intracellular 4-HNE are beneficial to cells, possibly promoting cellular proliferation, higher levels can cause a toxic response in the cell and may lead to cell death. Specifically, elevated 4-HNE levels are associated with cataracts, cancer, Alzheimer's disease and atherosclerosis, further supporting the negative impact of high 4-HNE levels on the overall health of the cell.

REFERENCES

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SOURCE

4-HNE (P-16) is a goat polyclonal antibody raised against a 4-HNE conjugate.

PRODUCT

Each vial contains 100 μ l serum.

APPLICATIONS

4-HNE (P-16) is recommended for detection of 4-Hydroxynonenal modified proteins by Western Blotting (starting dilution to be determined by researcher, dilution range 1:1000-1:5000).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.