

4-Hydroxynonenal Rabbit mAb

Catalog NO.: A26085

Recombinant

13 Publications

Basic Information

Observed MW

42-350kDa

Calculated MW

Category

Other Modified Antibodies

Applications

WB, IF/ICC, IF-P, FC (intra)

Cross-Reactivity

Species independent

Conjugation

Unconjugated

Clone number

ARC70314

Background

4-hydroxy-2-nonenal (4-hydroxynonenal, 4-HNE) is a highly reactive aldehyde generated by the exposure of polyunsaturated fatty acids to peroxides and reactive oxygen species (ROS). It non-enzymatically forms stable protein adducts with histidine, lysine, and cysteine side chains that have been used as biomarkers for oxidative damage in cells. Conditions where 4-HNE immunoreactivity has been observed include inflammation, neurodegenerative diseases, and ischemic damage to the heart and brain.

Recommended Dilutions

WB	1:1000 - 1:10000
IF/ICC	1:200 - 1:500
IF-P	1:200 - 1:500
FC (intra)	1:100 - 1:500

Immunogen Information

Gene ID	Swiss Prot
Immunogen	
Chemical compounds corresponding to 4-Hydroxynonenal.	
Synonyms	
4-HNE	

Contact

Product Information

☒		order@abclonal.com
☒		service@abclonal.com
☒		www.abclonal.com

Source

Rabbit

Isotype

IgG

Purification

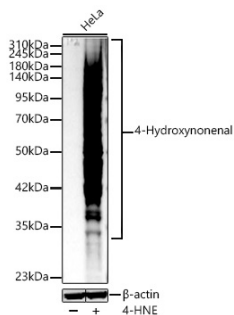
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Validation Data



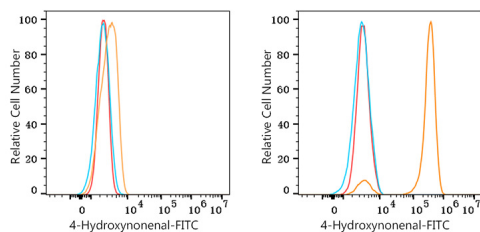
Western blot analysis of lysates from HeLa cells using 4-Hydroxynonenal Rabbit mAb (A26085) at 1:10000 dilution incubated overnight at 4°C. HeLa cells were treated with 4-HNE (0.2 mg/ml) at 37°C for 30 minutes. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 30 µg per lane.

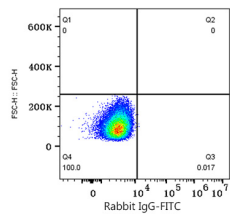
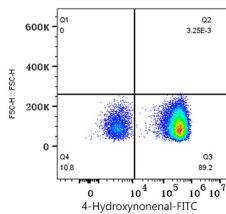
Blocking buffer: 3 % nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 30s.

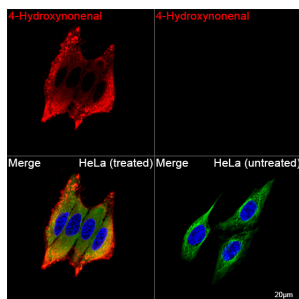


Flow cytometry: 1×10^6 HeLa cells (negative control, left) and HeLa cells (treated with 4-Hydroxynonenal, right) were intracellularly-stained with 4-Hydroxynonenal Rabbit mAb (A26085, 2 µg/mL, orange line) or Rabbit IgG isotype control (AC042, 2 µg/mL, blue line), followed by FITC conjugated goat anti-Rabbit pAb staining. Non-fluorescently stained cells were used as blank control (red line).

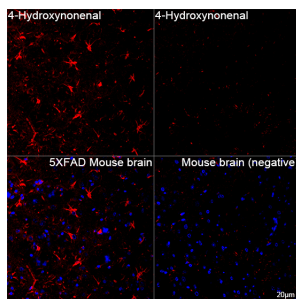


Flow cytometry: 1×10^6 HeLa cells (treated with 4-Hydroxynonenal) were intracellularly stained with Rabbit IgG isotype control (AC042,2 $\mu\text{g/mL}$, left) or 4-Hydroxynonenal Rabbit mAb (A26085,2 $\mu\text{g/mL}$, right), followed by FITC conjugated goat anti-Rabbit pAb staining.

Validation Data



Confocal imaging of HeLa cells (treated with 4-HNE) and HeLa cells (untreated) using 4-Hydroxynonenal Rabbit mAb (A26085, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of paraffin-embedded Mouse brain and 5xFAD Mouse brain tissue using 4-Hydroxynonenal Rabbit mAb (A26085, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

