ARG23717
anti-4 Hydroxynonenal antibody [12F7]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [12F7] recognizes 4 Hydroxynonenal
Tested Reactivity	Other
Tested Application	ELISA, ICC/IF, IHC-P, WB
Specificity	Specific for 4-Hydroxynonenal (4-HNE) modified proteins. Does not detect free 4-Hydroxynonenal. Does not cross-react with 4-Hydroxy-2-hexenal, Acrolein, Crotonaldehyde, Hexanoyl Lysine, Malondialdehyde, or Methylglyoxal modified proteins.
Host	Mouse
Clonality	Monoclonal
Clone	12F7
Isotype	IgG1
Target Name	4 Hydroxynonenal
Species	Others
Immunogen	Synthetic 4-Hydroxynonenal modified KLH.
Conjugation	Un-conjugated
Alternate Names	4-HNE

Application Instructions

Application table

Application	Dilution
ELISA	1:1000
ICC/IF	1:50
IHC-P	1:50
WB	1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

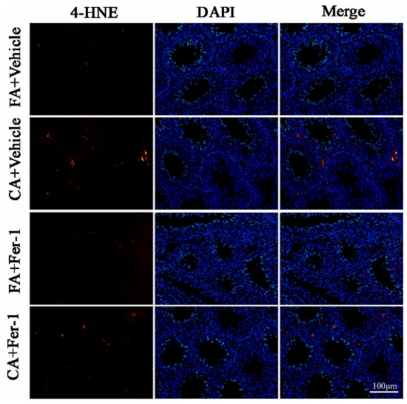
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol.
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol

Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Highlight	Related Antibody Duos and Panels: ARG30337 Ferroptosis / Oxytosis Antibody Panel Related products: Hydroxynonenal antibodies; Hydroxynonenal ELISA Kits; Hydroxynonenal Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: Ferroptosis/Oxytosis Antibody Panel is launched Pericytes, new therapeutic target for Alzheimer's disease? Therapeutic strategies against PDAC
Research Area	Ferroptosis/Oxytosis Study antibody; Lipid peroxidation Marker antibody

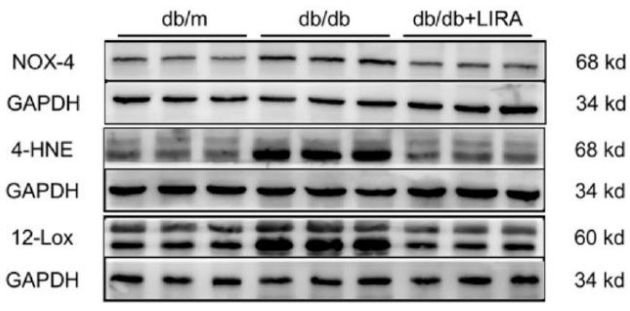
Images



ARG23717 anti-4 Hydroxynonenal antibody [12F7] IHC-P image

Immunohistochemistry: Mouse testis stained with ARG23717 anti-4 Hydroxynonenal antibody [12F7] at 1:50 dilution.

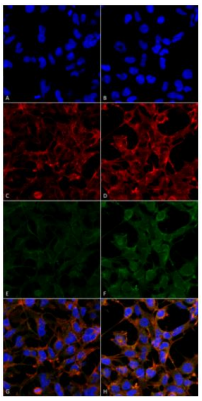
From Lipeng Li et al. FDX1 regulates leydig cell ferroptosis mediates PM2.5-induced testicular dysfunction of mice (2023), doi: 10.1016/j.ecoenv.2023.115309, Fig. 4A1.



ARG23717 anti-4 Hydroxynonenal antibody [12F7] WB image

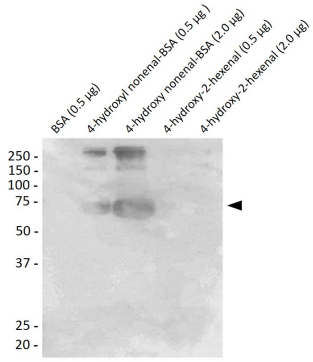
Western blot: Mouse kidney stained with ARG23717 anti-4 Hydroxynonenal antibody [12F7].

From Qi Chen et al. Scientific Reports. (2025), URL: https://www.nature.com/articles/s41598-025-85658-z, Fig. 4F.



ARG23717 anti-4 Hydroxynonenal antibody [12F7] ICC/IF image

Immunofluorescence: HEK293 cells fixed with 5% Formaldehyde (5 min). Cells were stained with ARG23717 anti-4 Hydroxynonenal antibody [12F7] at 1:50 for 30-60 min at RT. Magnification: 20X (2X Zoom). (A,C,E,G): Untreated. (B,D,F,H): Cells cultured overnight with 50 µM H2O2. (A,B) DAPI (blue) nuclear stain. (C,D) Phalloidin Alex Fluor 633 F-Actin stain. (E,F) Primary antibodies. (G,H) Composite.



ARG23717 anti-4 Hydroxynonenal antibody [12F7] WB image

Western blot: 0.5 µg of BSA, 0.5 µg of 4-hydroxyl nonenal-BSA, 2.0 µg of 4-hydroxy nonenal-BSA, 0.5 µg of 4-hydroxy-2-hexenal and 2.0 µg of 4-hydroxy-2-hexenal stained with ARG23717 anti-4 Hydroxynonenal antibody [12F7] at 1:1000 for 2 hours at RT.