Product Datasheet

FACL4 Antibody
NBP2-16401

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Reviews: 1 Publications: 5

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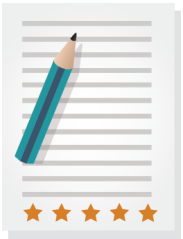
Updated 9/9/2025 v.20.1



NBP2-16401

FACL4 Antibody

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.025% Proclin 300
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	PBS, 20% Glycerol
Target Molecular Weight	79 kDa

Product Description

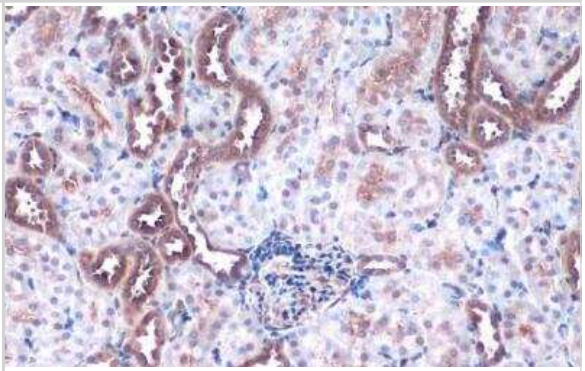
Description	Novus Biologicals Rabbit FACL4 Antibody (NBP2-16401) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and IP. Anti-FACL4 Antibody: Cited in 5 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	2182
Gene Symbol	ACSL4
Species	Human, Mouse, Rat
Immunogen	Carrier-protein conjugated synthetic peptide encompassing a sequence within the C-terminus region of human FACL4. The exact sequence is proprietary.

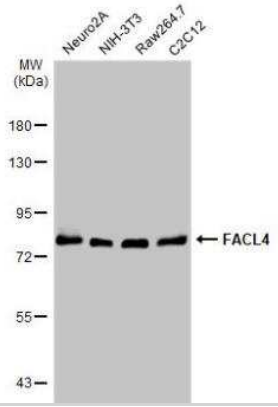
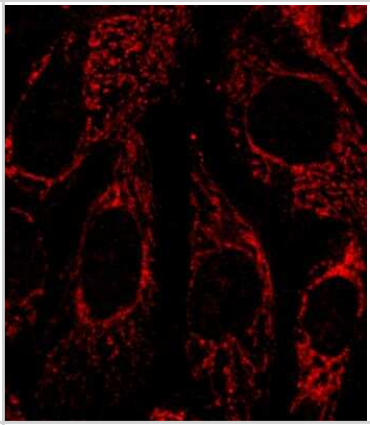
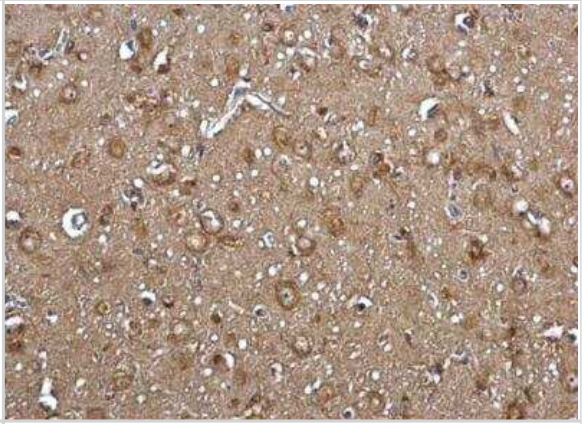
Product Application Details

Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot 1:500-1:10000, Immunohistochemistry 1:100-1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunoprecipitation 1:1000-1:5000, Immunohistochemistry-Paraffin 1:100-1:1000

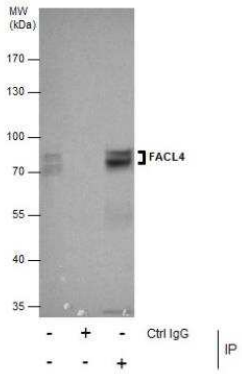
Images

Immunohistochemistry-Paraffin: FACL4 Antibody [NBP2-16401] - mouse kidney. FACL4 stained by FACL4 antibody [C3], C-term diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.

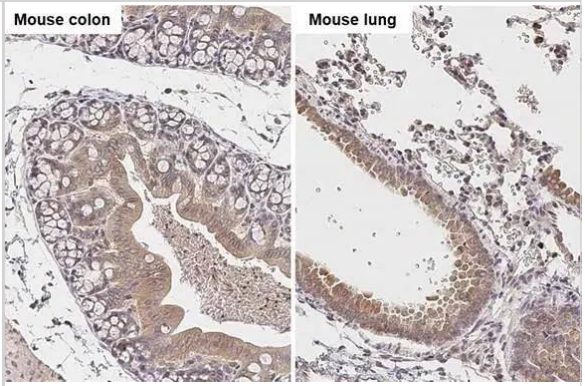


Western Blot: FACL4 Antibody [NBP2-16401] - Various whole cell extracts (30 ug) were separated by 7.5% SDS-PAGE, and the membrane was blotted with FACL4 antibody [C3], C-term diluted at 1:1000. The HRP-conjugated anti-rabbit IgG antibody (NBP2-19301) was used to detect the primary antibody.	
Immunocytochemistry/Immunofluorescence: FACL4 Antibody [NBP2-16401] - analysis of FACL4 in MCF10A cells using anti-FACL4 antibody. Image submitted by a verified customer review.	
Immunohistochemistry-Paraffin: FACL4 Antibody [NBP2-16401] - Rat middle brain. FACL4 antibody [C3], C-term dilution: 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min	
Immunohistochemistry-Paraffin: FACL4 Antibody [NBP2-16401] - Mouse lymph node. FACL4 antibody [C3], C-term dilution: 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min	

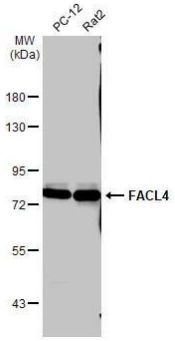
Immunoprecipitation: FACL4 Antibody [NBP2-16401] - Immunoprecipitation of FACL4 protein from HeLa whole cell extracts using 5 ug of FACL4 antibody [C3], C-term Western blot analysis was performed using FACL4 antibody [C3], C-term. EasyBlot anti-Rabbit IgG was used as a secondary reagent.



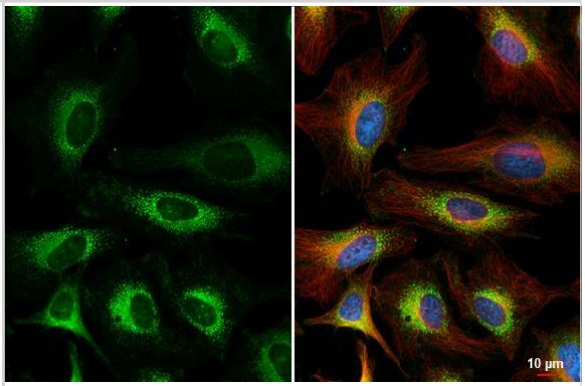
FACL4 antibody [C3], C-term detects FACL4 protein by immunohistochemical analysis.Sample: Paraffin-embedded mouse tissues.FACL4 stained by FACL4 antibody [C3], C-term (NBP2-16401) diluted at 1:500.Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



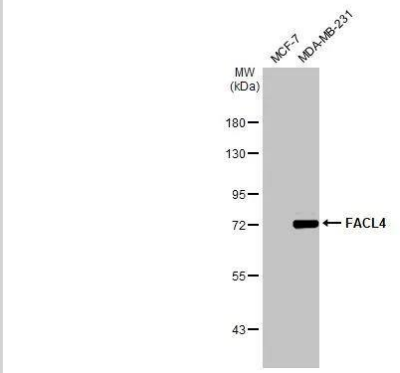
Various whole cell extracts (30 ug) were separated by 7.5% SDS-PAGE, and the membrane was blotted with FACL4 antibody [C3], C-term (NBP2-16401) diluted at 1:1000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



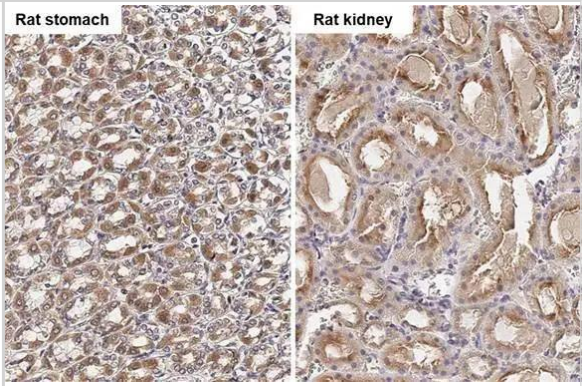
FACL4 antibody [C3], C-term detects FACL4 protein at cytoplasm by immunofluorescent analysis.Sample: HeLa cells were fixed in 4% paraformaldehyde at RT for 15 min.Green: FACL4 stained by FACL4 antibody [C3], C-term (NBP2-16401) diluted at 1:500.Red: alpha Tubulin, a cytoskeleton marker, stained by alpha Tubulin antibody [GT114] diluted at 1:1000.Blue: Fluoroshield with DAPI .



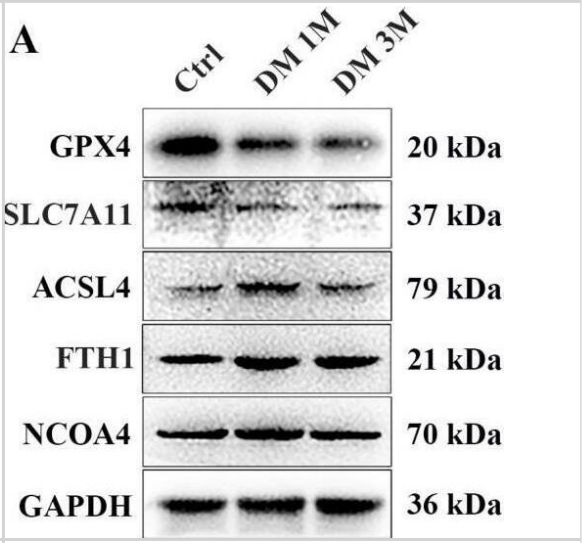
Various whole cell extracts (30 ug) were separated by 7.5% SDS-PAGE, and the membrane was blotted with FACL4 antibody [C3], C-term (NBP2-16401) diluted at 1:1000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



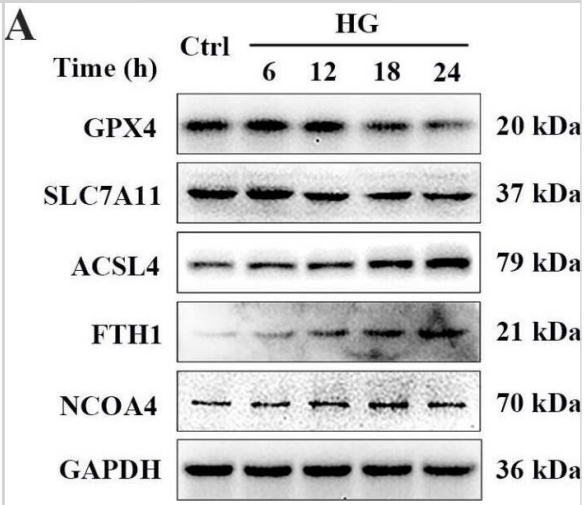
FACL4 antibody [C3], C-term detects FACL4 protein by immunohistochemical analysis.Sample: Paraffin-embedded rat tissues.FACL4 stained by FACL4 antibody [C3], C-term (NBP2-16401) diluted at 1:500.Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



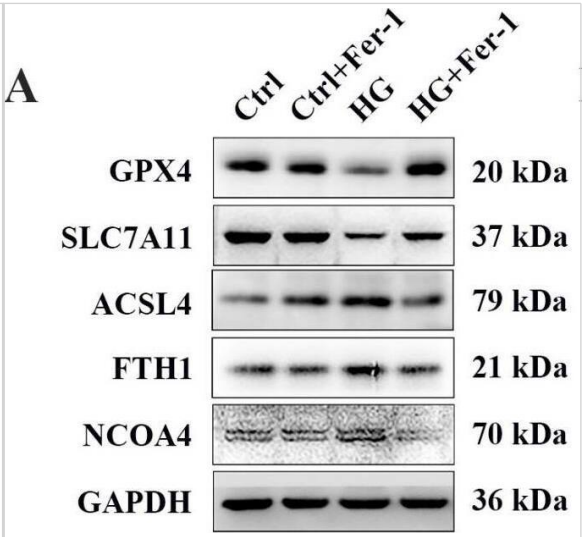
Expression and location of ferroptosis-related proteins in diabetic mice retinas. (A) Western blot analysis of ferroptosis-related proteins expression levels in retinas at 1 and 3 months post-diabetes. GAPDH was used as a control. (B) GPX4 and SLC7A11 protein expression was remarkably decreased in diabetic mice retinas compared with the control retinas. Expression of ACSL4, FTH1, and NCOA4 proteins was significantly increased in retinas at 1 and 3 months post-diabetes. (C) Immunofluorescence staining of location of ferroptosis-related proteins (red) and nuclear (blue) in retinas at 1 and 3 months post-diabetes: ganglion cell layer (GCL), inner nuclear layer (INL), outer nuclear layer (ONL), inner segment (IS), outer segment (OS). Data are shown as mean +/- SEM, n = 3 per group for Western blotting. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ versus Ctrl group. Scale bar: 50 μm. Image collected and cropped by CiteAb from the following open publication (https://www.mdpi.com/1422-0067/24/23/16946), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



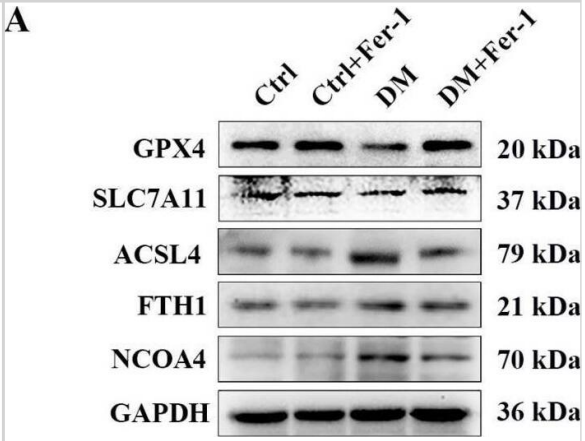
HG causes changes in the expression of ferroptosis-related proteins in 661W cells. (A) Western blot analysis of ferroptosis-related protein expression levels in HG-induced 661W cells. GAPDH was used as a control. (B) Expression of GPX4 and SLC7A11 proteins was significantly downregulated in HG-stimulated 661W cells after 12, 18, and 24 h. HG induced obvious upregulation in the expression of ACSL4, FTH1, and NCOA4 in 661W cells compared with the Ctrl group. (C) Immunofluorescence staining of localization of ferroptosis-related proteins (red) and nuclear (blue) in HG-induced 661W cells after 18 h. Data are shown as mean +/- SEM, n = 3 per group for Western blotting. p = not significant [ns], * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ versus Ctrl group. Scale bar: 50 μm. Image collected and cropped by CiteAb from the following open publication (https://www.mdpi.com/1422-0067/24/23/16946), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



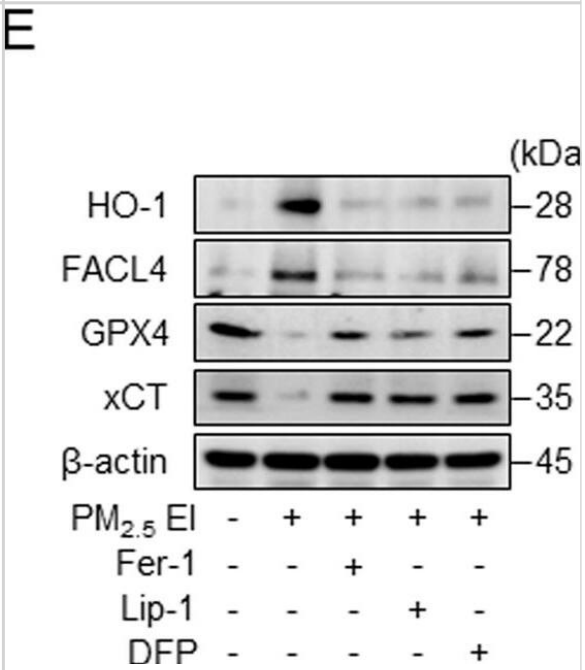
Fer-1 treatment attenuated changes in ferroptosis-related proteins' expression in HG-stimulated 661W cells after 18 h. (A) Western blot analysis of ferroptosis-related proteins' expression levels in HG-induced 661W cells after Fer-1 treatment. GAPDH was used as a control. (B) The downregulation in GPX4 and SLC7A11 protein expression in HG-stimulated 661W cells was significantly attenuated after Fer-1 treatment. The upregulation in ACSL4, FTH1, and NCOA4 protein expression in HG-stimulated 661W cells was effectively abrogated after Fer-1 treatment. (C) Immunofluorescence staining of ferroptosis-related proteins (red) and nuclear (blue) in HG-induced 661W cells after Fer-1 administration. Data are shown as mean +/- SEM, n = 3 per group for Western blotting. p = not significant [ns], * p < 0.05, ** p < 0.01 versus Ctrl group. Scale bar: 50 μm. Image collected and cropped by CiteAb from the following open publication (https://www.mdpi.com/1422-0067/24/23/16946), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



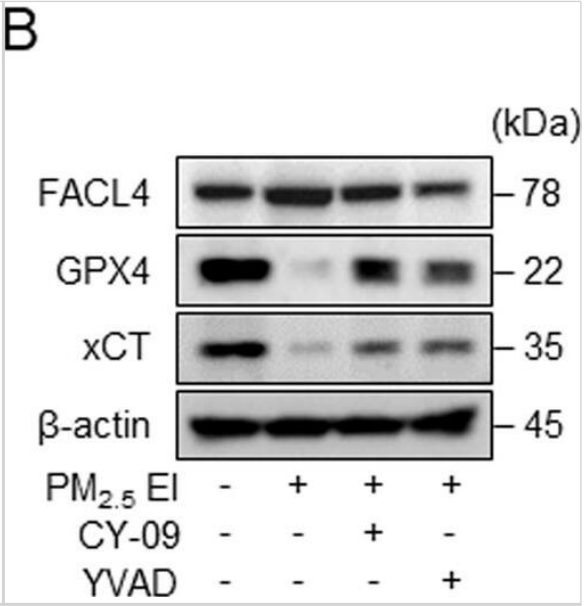
Fer-1 administration attenuated changes of ferroptosis-related proteins expression in diabetic mice retinas. (A) Western blot analysis of ferroptosis-related proteins expression levels in diabetic mice retinas after Fer-1 treatment. GAPDH was used as a control. (B) The decrease in GPX4 and SLC7A11 protein expression in diabetic mice retinas was significantly attenuated after Fer-1 treatment. The increase in ACSL4, FTH1, and NCOA4 protein expression in diabetic mice retinas was effectively abrogated after Fer-1 treatment. (C) Immunofluorescence staining of ferroptosis-related proteins (red) and nuclear (blue) in diabetic mice retinas after Fer-1 treatment: ganglion cell layer (GCL), inner nuclear layer (INL), outer nuclear layer (ONL), inner segment (IS), outer segment (OS). Data are shown as mean +/- SEM, n = 3 per group for Western blotting. p = not significant [ns], * p < 0.05, ** p < 0.01 versus Ctrl group. Scale bar: 50 μm. Image collected and cropped by CiteAb from the following open publication (https://www.mdpi.com/1422-0067/24/23/16946), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



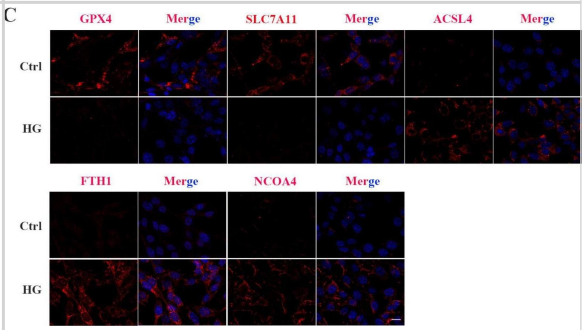
Extraction ion-containing PMs (PM2.5 EI) cause ferroptosis in macrophages.A Western blot analysis after incubation of RAW264.7 cells with three types of PM (100 μg/ml) for 18 h. B Malondialdehyde (MDA) formation in RAW264.7 cells after incubation with 100 μg/ml PMs for 12 h, investigated using a lipid peroxidation assay kit. C Intracellular ferrous iron levels are detected in J774A.1 cells incubated with 50 μg/ml of PMs for 12 h. D WST-8 assay demonstrating the cell viability analysis in RAW264.7 line after pretreatment with ferrostatin-1 (Fer-1; 2 μM), liproxstatin-1 (Lip-1; 2 μM), or deferiprone (DFP; 100 μM) for 2 h followed by the stimulation with 100 μg/ml of PM2.5 EI for 24 h. E Western blot analysis using RAW264.7 cells after preincubation with Fer-1 (2 μM), Lip-1 (2 μM), or DFP (100 μM) for 2 h followed by stimulation with 100 μg/ml of PM2.5 EI for 24 h. F Detection of lipid peroxidation in terms of MDA in J774A.1 cells after preincubation with Fer-1 (2 μM), Lip-1 (2 μM), or DFP (100 μM) for 2 h followed by treatment using 50 μg/ml of PM2.5 EI for 12 h. All data are presented as the means +/- standard deviations from at least three independent experiments. *P < 0.05, **P < 0.01 and #P < 0.001. All experiments were conducted at least three times. Image collected and cropped by CiteAb from the following open publication (https://www.nature.com/articles/s41420-024-01874-y), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



PM2.5 EI induces a correlation between the activation of inflammasomes and the induction of ferroptosis.A and B Western blot analysis in J774A.1 cells after preincubation with CY-09 (10 μM) or YVAD (20 μM) for 2 h and subsequent stimulation with 50 μg/ml of PM2.5 EI for 24 h. C MDA levels in J774A.1 cells after pretreatment with CY-09 (10 μM) or YVAD (20 μM) for 2 h followed by stimulation with 50 μg/ml of PM2.5 EI for 12 h tested using a lipid peroxidation assay kit. D Western blot analysis using J774A.1 cells preincubated with Fer-1 (2 μM), Lip-1 (2 μM), or DFP (100 μM) for 2 h and treated using 50 μg/ml of PM2.5 EI for 24 h. E, F ELISA assay revealed the IL-1β and IL-18 levels in the medium of J774A.1 cell culture after pretreatment with CY-09 (10 μM) or YVAD (20 μM) for 2 h and subsequent stimulation with 50 μg/ml of PM2.5 EI for 12 h. All data are presented as the means +/- standard deviations from at least three independent experiments. *P < 0.05, **P < 0.01 and #P < 0.001. All experiments were conducted at least three times. Image collected and cropped by CiteAb from the following open publication (https://www.nature.com/articles/s41420-024-01874-y), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



HG causes changes in the expression of ferroptosis-related proteins in 661W cells. (A) Western blot analysis of ferroptosis-related protein expression levels in HG-induced 661W cells. GAPDH was used as a control. (B) Expression of GPX4 and SLC7A11 proteins was significantly downregulated in HG-stimulated 661W cells after 12, 18, and 24 h. HG induced obvious upregulation in the expression of ACSL4, FTH1, and NCOA4 in 661W cells compared with the Ctrl group. (C) Immunofluorescence staining of localization of ferroptosis-related proteins (red) and nuclear (blue) in HG-induced 661W cells after 18 h. Data are shown as mean +/- SEM, n = 3 per group for Western blotting. p = not significant [ns], * p < 0.05, ** p < 0.01, *** p < 0.001 versus Ctrl group. Scale bar: 50 μm. Image collected and cropped by CiteAb from the following open publication (https://www.mdpi.com/1422-0067/24/23/16946), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Minkyung Park, Sujeong Park, Yumin Choi, Young-Lai Cho, Min Jeong Kim, Young-Jun Park, Su Wol Chung, Heedoo Lee, Seon-Jin Lee The mechanism underlying correlation of particulate matter-induced ferroptosis with inflammasome activation and iron accumulation in macrophages Cell Death Discovery 2024-03-15 [PMID: 38491062]

Sha Gao, Shuang Gao, Yanuo Wang, Na Li, Zijian Yang, Huiping Yao, Yanwei Chen, Yu Cheng, Yisheng Zhong, Xi Shen, Claudio Bucolo Inhibition of Ferroptosis Ameliorates Photoreceptor Degeneration in Experimental Diabetic Mice International Journal of Molecular Sciences 2023-11-29 [PMID: 38069270]

Tang W, Dong M, Teng F et al. Environmental Allergens House Dust Mites-induced Asthma Causes Ferroptosis in the Lungs Research Square 2021-02-24 [PMID: 34765024] (WB, Mouse)

Duplaquet L, Leroy C, Vinchent A et al. Control of cell death/survival balance by the MET dependence receptor Elife 2020-02-24 [PMID: 32091387] (IF/IHC, Mouse)

Nuzzo D, Amato A, Picone P et al. A Natural Dietary Supplement with a Combination of Nutrients Prevents Neurodegeneration Induced by a High Fat Diet in Mice. Preprints (www.preprints.org) | 2018-07-16 [PMID: 30134549] (WB, Mouse)

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Products Related to NBP2-16401

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

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