Product Datasheet

AIF-1/Iba1 Antibody - Azide and BSA Free
NBP2-19019

Unit Size: 100 ul

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

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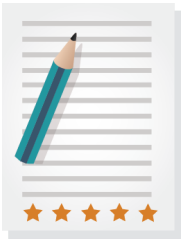
Updated 2/23/2025 v.20.1



NBP2-19019

AIF-1/Iba1 Antibody - Azide and BSA Free

Product Information

Unit Size	100 ul
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	No Preservative
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	PBS
Target Molecular Weight	17 kDa

Product Description

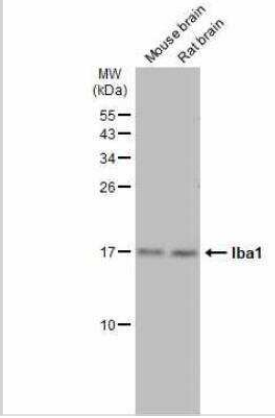
Host	Rabbit
Gene ID	199
Gene Symbol	AIF1
Species	Human, Mouse, Rat
Marker	pan-Microglia Marker
Immunogen	Carrier-protein conjugated synthetic peptide encompassing a sequence within the C-terminus region of human AIF-1/Iba1. The exact sequence is proprietary.

Product Application Details

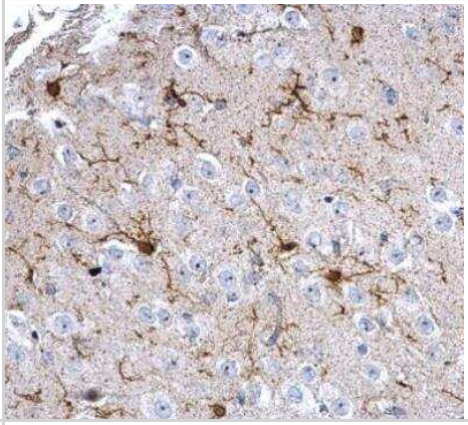
Applications	Western Blot, Simple Western, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunohistochemistry Free-Floating
Recommended Dilutions	Western Blot 1:500-1:10000, Simple Western 1:50, Flow Cytometry 1:50-1:200, Immunohistochemistry 1:100-1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunohistochemistry-Paraffin 1:100-1:1000, Immunohistochemistry-Frozen 1:100-1:1000, Immunohistochemistry Free-Floating Assay dependent
Application Notes	Simple Western Separated by Size, antibody dilution of 1:50, detects a band at 25 kDa.

Images

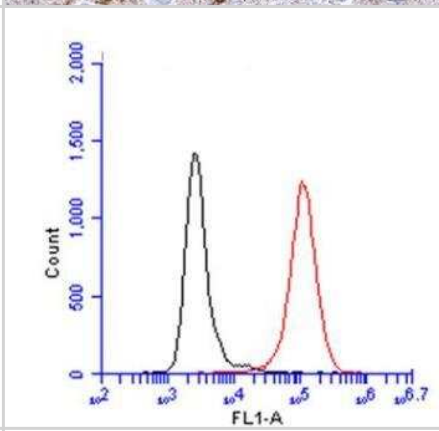
Western Blot: AIF-1/Iba1 Antibody [NBP2-19019] - Various 50 ug tissue extracts (Molecular weight: 16.7 KDa) were separated by 15% SDS-PAGE, and the membrane was blotted with AIF-1/Iba1 Antibody diluted at 1:1000. The HRP-conjugated anti-rabbit IgG antibody (NBP2-19301) was used to detect the primary antibody.



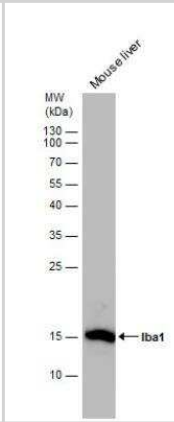
Immunohistochemistry-Paraffin: AIF-1/Iba1 Antibody [NBP2-19019] - Mouse fore brain. Iba1 antibody dilution: 1:500. Antigen Retrieval: Trilogy ™ (EDTA based, pH 8.0) buffer, 15min



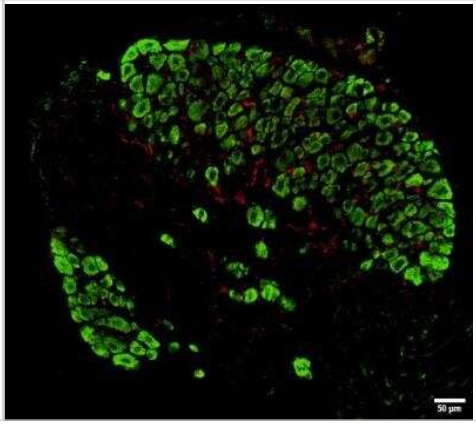
Flow Cytometry: AIF-1/Iba1 Antibody [NBP2-19019] - THP-1 cell. Black: Unlabelled sample was used as a control. Red: AIF-1:Iba1 Antibody dilution: 1:50.



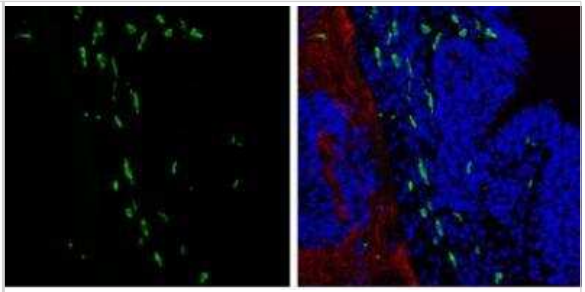
Western Blot: AIF-1/Iba1 Antibody [NBP2-19019] - Mouse tissue extract (50 ug) was separated by 15% SDS-PAGE, and the membrane was blotted with AIF-1/Iba1 Antibody diluted at 1:1000.



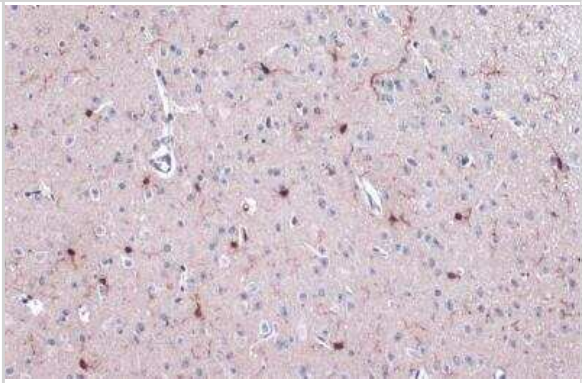
Immunocytochemistry/Immunofluorescence: AIF-1/Iba1 Antibody [NBP2-19019] - AIF-1/Iba1 Antibody (1 1:1000, Red) expression in dorsal root ganglia. Green fluorescent Nissl was used as counter-staining. Image submitted by a verified customer review.



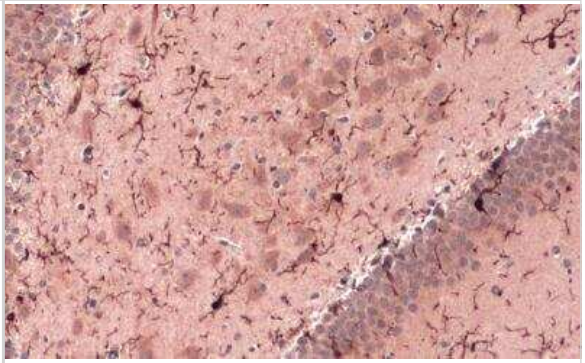
Immunohistochemistry-Frozen: AIF-1/Iba1 Antibody [NBP2-19019] - Frozen sectioned E13.5 Rat brain. Green: AIF-1/Iba1 protein stained by AIF-1/Iba1 Antibody diluted at 1:250. Red: beta Tubulin 3/ TUJ1, a mature neuron marker, stained by beta Tubulin 3/ TUJ1 antibody [11710] (NBP2-43559) diluted at 1:500. Blue: Fluoroshield with DAPI.



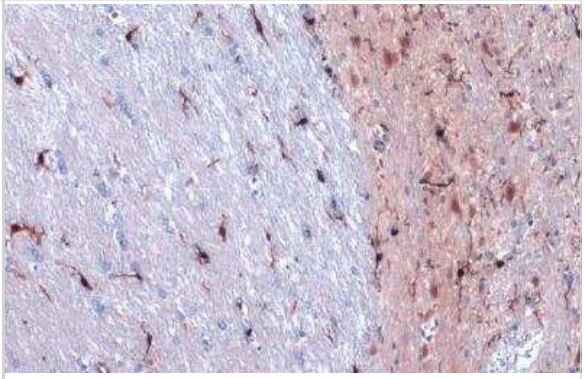
Immunohistochemistry-Paraffin: AIF-1/Iba1 Antibody [NBP2-19019] - Mouse cerebellum stained by AIF-1/Iba1 Antibody diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.

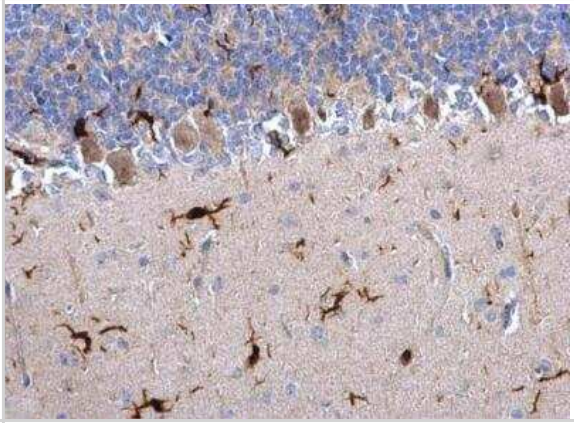
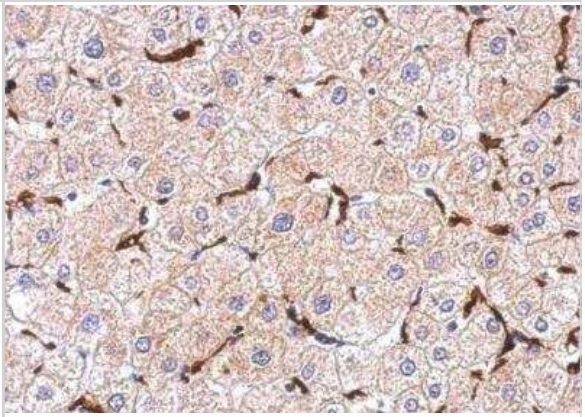
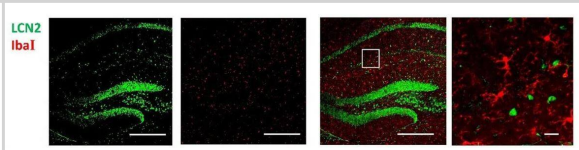
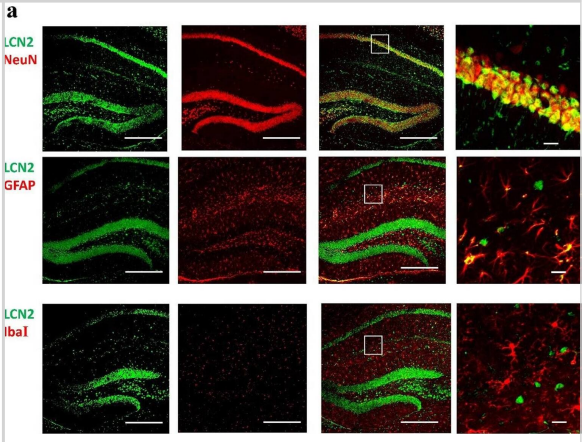


Immunohistochemistry-Paraffin: AIF-1/Iba1 Antibody [NBP2-19019] - Rat brain stained by AIF-1/Iba1 Antibody diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.

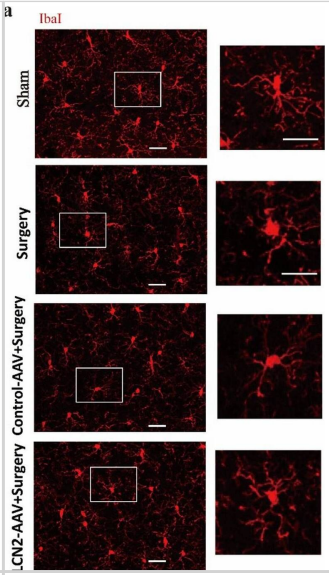


Immunohistochemistry-Paraffin: AIF-1/Iba1 Antibody [NBP2-19019] - Rat cerebellum stained by AIF-1/Iba1 Antibody diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.

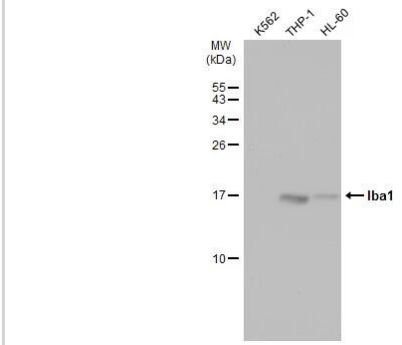


Immunohistochemistry-Paraffin: AIF-1/Iba1 Antibody [NBP2-19019] - Rat hind brain. Iba1 antibody dilution: 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min	
Immunohistochemistry-Paraffin: AIF-1/Iba1 Antibody [NBP2-19019] - Analysis of paraffin-embedded human hepatoma, using at 1:500 dilution.Iba1 antibody detects AIF-1/Iba1 in the cytosol of Kupffer cell in human hepatoma by immunohistochemical analysis.	
Immunohistochemistry: AIF-1/Iba1 Antibody [NBP2-19019] - LCN2 mainly expressed on neurons. a Representative immunofluorescence images of LCN2 (green) and AIF-1/Iba1 (red) staining in sections of the hippocampus after surgery. Long scale bar, 600 um; short scale bar, 25 um. Image collected and cropped by CiteAb from the following publication (pubmed.ncbi.nlm.nih.gov/35413913) licensed under a CC-BY license.	
Immunocytochemistry/ Immunofluorescence: AIF-1/Iba1 Antibody [NBP2-19019] - LCN2 mainly expressed on neurons. a Representative immunofluorescence images of LCN2 (green), GFAP (red), NeuN (red) & IbaI (red) staining in sections of the hippocampus after surgery. Long scale bar, 600 µm; short scale bar, 25 µm. b Percentage quantification of LCN2 positive cells (n = 3 mice/group). c Cartoon depicting MACS sorting procedures for isolating CD11b+ & CD11b − cells. d Relative expression of cx3cr1 in CD11b + & CD11b − cells after sorting from all samples. d Relative expression level of Lcn2 mRNA in CD11b + & CD11b − cells from hippocampus 6 h after surgery. e Relative expression level of IL-6 mRNA in CD11b + cells. Data are represented as mean ± SEM. **** P < 0.0001 Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/35413913), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

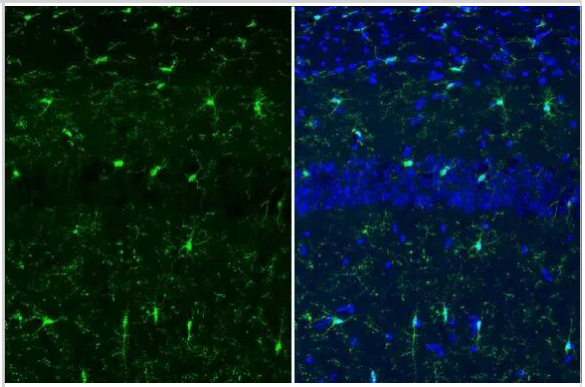
Immunocytochemistry/ Immunofluorescence: AIF-1/Iba1 Antibody [NBP2-19019] - Knockdown of LCN2 prevents microglial activation & neuroinflammation. a Representative immunofluorescence images of hippocampal sections with Iba1+ cells (White). Scale bars, 150 μm. b Quantification of the microglia density in (A) (n = 4 mice/group, 2–3 slides/mice). c Quantification of the microglia Ramification index at 24 h after surgery (n = 72 cells from 4 mice/group). d Number of process intersections with shells at distances (in 2 μm in increments) from the soma by Sholl analysis at 24 h after surgery (n = 72 cells from 4 mice/group). e Tissue ELISA of IL-6 at 24 h after surgery (n = 5 mice/group). f Relative expression level of tnf-α, IL-6 and/or IL-1β 6 h after application of rLCN2 (500 ng/mL) on BV-2 (n = 4–6/group) & primary microglia cells (n = 3/group). Vehicle: PBS buffer. Data represent mean ± SEM; n = 4/group. * P < 0.05; *** P < 0.001 Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/35413913), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



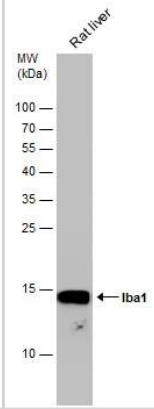
Western Blot: AIF-1/Iba1 Antibody [NBP2-19019] - Various whole cell extracts (30 ug) were separated by 15% SDS-PAGE, and the membrane was blotted with AIF-1/Iba1 antibody (NBP2-19019) diluted at 1:5000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



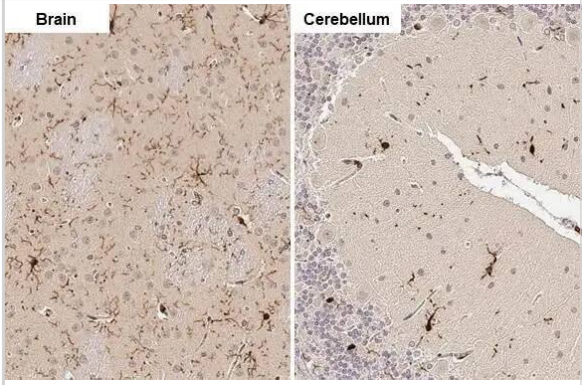
Immunohistochemistry: AIF-1/Iba1 Antibody [NBP2-19019] - AIF-1/Iba1 antibody detects AIF-1/Iba1 protein at cell membrane and cytoplasm by immunohistochemical analysis.Sample: Frozen-sectioned mouse brain.Green: AIF-1/Iba1 stained by AIF-1/Iba1 antibody (NBP2-19019) diluted at 1:500.Blue: Fluoroshield with DAPI .Antigen Retrieval: ice-cold MeOH for 5 min



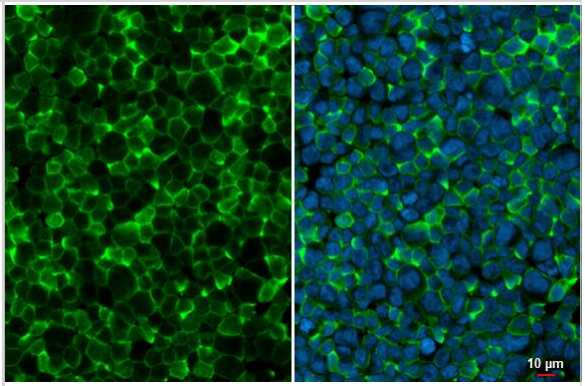
Western Blot: AIF-1/Iba1 Antibody [NBP2-19019] - Rat tissue extract (50 ug) was separated by 15% SDS-PAGE, and the membrane was blotted with AIF-1/Iba1 antibody (NBP2-19019) diluted at 1:1000.



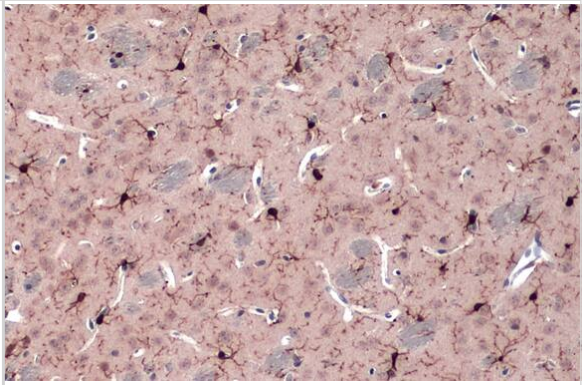
Immunohistochemistry-Paraffin: AIF-1/Iba1 Antibody [NBP2-19019] - AIF-1/Iba1 antibody detects AIF-1/Iba1 protein by immunohistochemical analysis.Sample: Paraffin-embedded rat tissues.AIF-1/Iba1 stained by AIF-1/Iba1 antibody (NBP2-19019) diluted at 1:100.Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



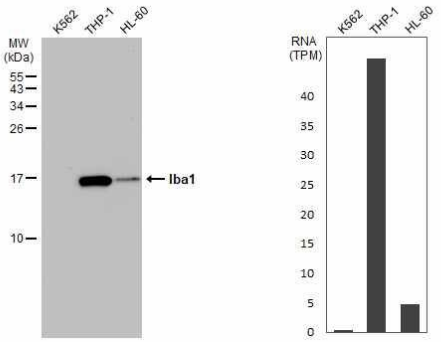
Immunocytochemistry/ Immunofluorescence: AIF-1/Iba1 Antibody [NBP2-19019] - AIF-1/Iba1 antibody detects AIF-1/Iba1 protein at cell membrane by immunofluorescent analysis.Sample: THP-1 cells were fixed in 4% paraformaldehyde at RT for 15 min.Green: AIF-1/Iba1 stained by AIF-1/Iba1 antibody (NBP2-19019) diluted at 1:500.Blue: Fluoroshield with DAPI .



Immunohistochemistry-Paraffin: AIF-1/Iba1 Antibody [NBP2-19019] - AIF-1/Iba1 antibody detects AIF-1/Iba1 protein at cell membrane and cytoplasm by immunohistochemical analysis.Sample: Paraffin-embedded mouse brain.AIF-1/Iba1 stained by AIF-1/Iba1 antibody (NBP2-19019) diluted at 1:500.Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



Western Blot: AIF-1/Iba1 Antibody [NBP2-19019] - Various whole cell extracts (30 ug) were separated by 15% SDS-PAGE, and the membrane was blotted with Iba1 antibody diluted at 1:5000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody. Correspo



Publications

Kulesskaya N, Bhattacharjee A, Holmström KM et al. HER-096 is a CDNF-derived brain-penetrating peptidomimetic that protects dopaminergic neurons in a mouse synucleinopathy model of Parkinson's disease Cell chemical biology 2023-11-24 [PMID: 38039968]

Ma, N;Li, G;Fu, X; Protective role of activating transcription factor 3 against neuronal damage in rats with cerebral ischemia Brain and behavior [PMID: 35263513]

Katja Niesel, Michael Schulz, Julian Anthes, Tijna Alekseeva, Jadranka Macas, Anna Salamero□Boix, Aylin Möckl, Timm Oberwahrenbrock, Marco Lolies, Stefan Stein, Karl H Plate, Yvonne Reiss, Franz Rödel, Lisa Sevenich The immune suppressive microenvironment affects efficacy of radio□immunotherapy in brain metastasis EMBO Molecular Medicine 2021-03-23 [PMID: 33755340]

Hong J, Adam RJ, Gao L et al. Macrophage activation in stellate ganglia contributes to lung injury-induced arrhythmogenesis in male rats Acta physiologica (Oxford, England) 2021-04-05 [PMID: 33817984]

Tylek K, Trojan E, Le?kiewicz M et al. Microglia Depletion Attenuates the Pro-Resolving Activity of the Formyl Peptide Receptor 2 Agonist AMS21 Related to Inhibition of Inflammasome NLRP3 Signalling Pathway: A Study of Organotypic Hippocampal Cultures Cells 2023-11-03 [PMID: 37947648] (WB, Rat)

Madi A, Sheinin R, Salomon K et al. interFLOW: maximum flow framework for the identification of factors mediating the signaling convergence of multiple receptors Research Square 2023-10-31 (IHC, Mouse)

Tsujikawa S, DeMeulenaere KE, Centeno MV et al. Regulation of neuropathic pain by microglial Orai1 channels Science Advances 2023-01-27 [PMID: 36706180] (Block/Neutralize)

Henriques A, Rouvi□re L, Giorla E et al. Alpha-Synuclein: The Spark That Flames Dopaminergic Neurons, In Vitro and In Vivo Evidence International Journal of Molecular Sciences 2022-08-30 [PMID: 36077253] (Immunohistochemistry)

Williams EP, Xue Y, Lee J et al. Deep spatial profiling of Venezuelan equine encephalitis virus reveals increased genetic diversity amidst neuroinflammation and cell death during brain infection Journal of Virology 2023-08-31 [PMID: 37560924]

Pawlik K, Ciapa?a K, Ciechanowska A et al. Pharmacological Evidence of the Important Roles of CCR1 and CCR3 and Their Endogenous Ligands CCL2/7/8 in Hypersensitivity Based on a Murine Model of Neuropathic Pain Cells 2022-12-26 [PMID: 36611891]

Ciechanowska A, Rojewska E, Piotrowska A et al. New insights into the analgesic properties of the XCL1/XCR1 and XCL1/ITGA9 axes modulation under neuropathic pain conditions - evidence from animal studies Frontiers in immunology 2022-12-22 [PMID: 36618360] (WB, Mouse)

Abhishek T, Shih-Ying W, Sambad S et al. Exosomal miR-4466 from nicotine-activated neutrophils promotes tumor cell stemness and metabolism in lung cancer metastasis Oncogene. 2022-04-23 [PMID: 35461327] (Immunohistochemistry, Human)

More publications at http://www.novusbio.com/NBP2-19019

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Products Related to NBP2-19019

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP1-51074-0.1mg	Recombinant Human AIF-1/Iba1 His Protein

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.

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