Product Datasheet

BNIP3L Antibody - BSA Free NBP1-88558

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Updated 2/21/2025 v.20.1

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NBP1-88558

BNIP3L Antibody - BSA Free

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	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol
Product Description	
Host	Rabbit
Gene ID	665
Gene Symbol	BNIP3L
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in the scientific literature (PMID: 24573672).
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: SNGNDNGNGKNGGLEHVPSSSSIHNGDMEKILLDAQHESGQSSSRGSSHCDS PSPQEDGQIMFDVEMHTSRDHSSQSEEEVVEGEKEVEALKKSADWVSDWSS RPENIPPKEFHFRHPKRSVSLSMRKSGAMK
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot Reported in scientific literature (PMID:33473105), Immunohistochemistry 1:200 - 1:500, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:200 - 1:500
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. ICC/IF Fixation Permeabilization: Use PFA/Triton X-100.

Images

Immunohistochemistry-Paraffin: BNIP3L Antibody [NBP1-88558] -Staining in human placenta and pancreas tissues using anti-BNIP3L antibody. Corresponding BNIP3L RNA-seq data are presented for the same tissues.



BNIP3L in Placenta

BNIP3L in Pancreas

RNA [TPM]

RNA [TPM] 20 40 60 80 100



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Corticosterone affects NIX-dependent mitophagy through decreasing PGC1 α in vivo.a–f Mice exposed to vehicle, corticosterone (10 mg/kg), corticosterone with phorbol 12-myristate 13-acetate (PMA pretreatment, 200 µg/kg), or PMA alone for 7 days. a Slide samples for IHC immunostained with LAMP1 (green), TOMM20 (red), & DAPI (blue). Scale bars, $100 \,\mu\text{m}$ (magnification, $\times 200$). n = 5. b The expressions of NIX, PTEN-induced kinase 1 (PINK1), & BCL2 interacting protein 3 (BNIP3) detected with WBt where β -actin used as a loading control. n = 5. c Slide samples for IHC immunostained with synpatophysin (green), PSD95 (red), & DAPI (blue). Scale bars, 100 µm (magnification, ×200). n = 5. d Synaptophysin & PSD95 detected by WBt. Loading control is β -actin. n = 5. e The mice subjected to Y-maze test to evaluate spatial memory function. n = 6. f The mice subjected to forced swim test to evaluate depression-like behavior. n = 5. g Vehicle or RU 486 (5 mg/kg) injected mice presented with/without corticosterone (10 mg/kg) for 3 days. The expressions of peroxisome proliferator-activated receptor gamma coactivator 1-alpha (PGC1a) & NIX visualized via WB. Loading control is β -actin. n = 5. h The schematic model for mechanisms of inhibition in NIX-dependent mitophagy by glucocorticoid was shown. All blots & IF images representative. n = 5 or 6 from each animal with two technical replicates each in results of IHC & WBt. Quantitative data presented as a mean ± S.E.M. The representative images acquired by SRRF imaging system. Two-sided two-way ANOVA was conducted except Fig. 8b, data of which analyzed by two-sided unpaired student's t test. ** indicates p < 0.01 versus control & ## indicates p < 0.01 versus corticosterone, respectively. Data provided as a Source data file. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33473105), licensed under a CC-BY license. Not internally tested by Novus Biologicals.











Immunocytochemistry/ Immunofluorescence: BNIP3L Antibody [NBP1-88558] - The role of PA in BNIP3 silenced UCB-hMSC survival in the mouse skin wound healing model. (A) Mouse skin wound surgery with UCB-hMSC transplantation was performed as described in Section 2. Representative gross wound images were acquired at post injection days 0, 4, 8, 12. Skin wound sizes at day 8 were compared with wound size at day 0. n = 5. (B) Tissue slide samples were stained with hematoxylin & eosin. Low & high magnified histological gross images are shown in the left & right panels, respectively. Scale bars, 260 µm (magnification, ×40) & 100 μm (magnification, ×100). n = 5. (C) Representative images of blood vessels in skin wounds on day 12 (top panel). Vessel density was analyzed by using ImageJ program (bottom panel). n = 5. (D-F) Histological tissue samples were immuno-stained with CD31, α -SMA, & HNA-specific antibodies & PI for counterstaining. α-SMA & HNA-positive cells were visualized by confocal microscopy. The number of CD31 & α -SMA-positive cells in high power field (HPF), & the percentage of HNA-positive cells in total cells were analyzed by using Metamorph software. Scale bars, 100 µm (magnification, ×100). n = 5. Data are presented as a mean \pm S.E.M. p < 0.05 versus vehicle group, p < 0.05versus UCB-hMSC group given NT siRNA, #p < 0.05 versus UCB-hMSC group given NT siRNA with hypoxia pretreatment, @p < 0.05 versus UCB-hMSC group given BNIP3 siRNA with hypoxia pretreatment. Image collected & cropped by CiteAb from the following publication (https://linkinghub.elsevier.com/retrieve/pii/S2213231717303804), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

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Publications

Kim MJ, Choi GE, Chae CW et al. Melatonin-mediated FKBP4 downregulation protects against stress-induced neuronal mitochondria dysfunctions by blocking nuclear translocation of GR Cell death & disease 2023-02-21 [PMID: 36810730] (WB, Human)

Choi GE, Lee HJ, Chae CW, et al. BNIP3L/NIX-mediated mitophagy protects against glucocorticoid-induced synapse defects Nature communications 2021-01-20 [PMID: 33473105] (WB, Mouse)

Lee H, Jung Y, Choi G et al. BNIP3 induction by hypoxia stimulates FASN-dependent free fatty acid production enhancing therapeutic potential of umbilical cord blood-derived human mesenchymal stem cells Redox Biol 2017-07-04 [PMID: 28704726] (WB, Human)

Li W, Zhang X, Zhuang H et al. MicroRNA-137 Is a Novel Hypoxia-responsive MicroRNA That Inhibits Mitophagy via Regulation of Two Mitophagy Receptors FUNDC1 and NIX. J Biol Chem 2014-04-11 [PMID: 24573672] (ICC/IF, Mouse)

Stadler C, Rexhepaj E, Singan VR et al. Immunofluorescence and fluorescent-protein tagging show high correlation for protein localization in mammalian cells. Nat Methods 2013-04-01 [PMID: 23435261]





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NBP1-88558PEP	BNIP3L Recombinant Protein Antigen
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NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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