Product Datasheet

ANP32B Antibody

NB100-1199

Unit Size: 0.1 mg

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

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Updated 10/23/2024 v.20.1

NB100-1199

ANP32B Antibody

Product Information

Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA

Product Description

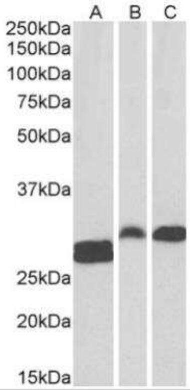
Host	Goat
Gene ID	10541
Gene Symbol	ANP32B
Species	Human, Mouse, Rat, Porcine
Reactivity Notes	Rat reactivity reported in scientific literature (PMID: 25034417).
Specificity/Sensitivity	This antibody does NOT recognize theTNF family member also known as APRIL - Gene ID number 8741. However this antibody may cross-react with ANP32A (GeneID 8125).
Immunogen	Peptide with sequence C-KRKRETDDEGEDD corresponding to C-Terminus according to NP_006392.1.

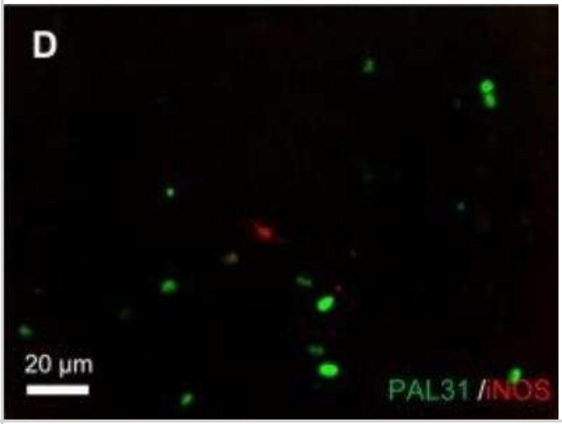
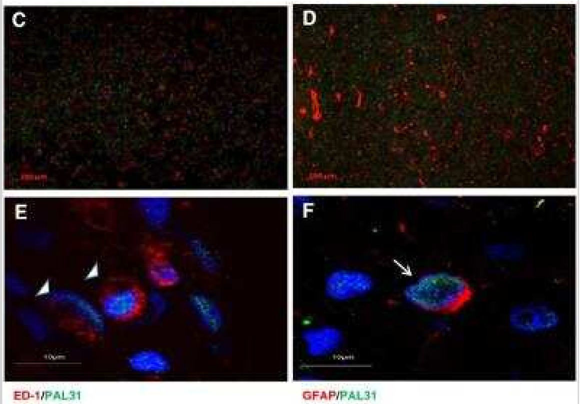
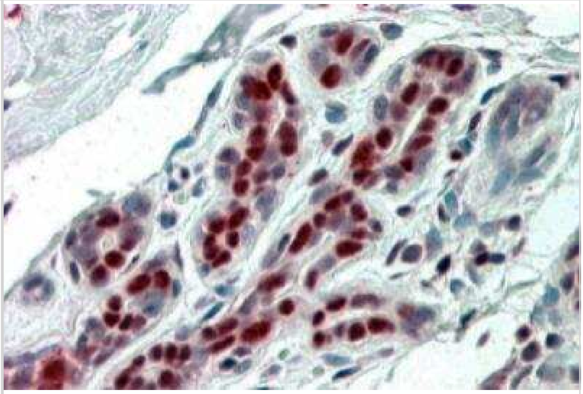
Product Application Details

Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Peptide ELISA, Knockdown Validated
Recommended Dilutions	Western Blot 0.1 - 0.3 ug/ml, Immunohistochemistry 3 - 5 ug/ml, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 3-5 ug/ml, Peptide ELISA Detection limit 1:16000, Knockdown Validated
Application Notes	WB: Approx. 26 kDa band observed in human tonsil lysates (calculated MW of 28.8 kDa band according to NP_006392.1). IHC-P: Human breast shows nuclear staining in lobular cells.

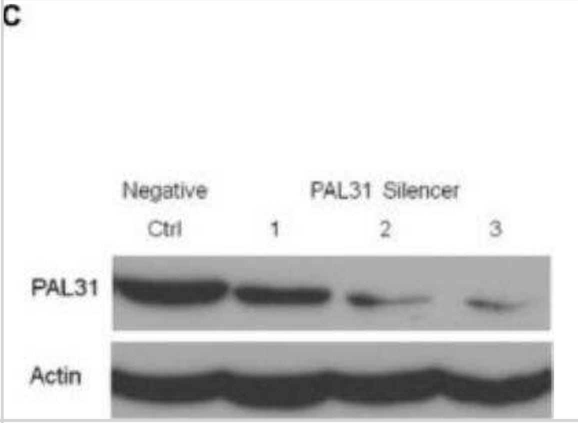
Images

Western Blot: ANP32B Antibody [NB100-1199] - 0.1 ug/ml) staining of Human Tonsil (A) and Rat (B) and Pig (C) Spleen lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

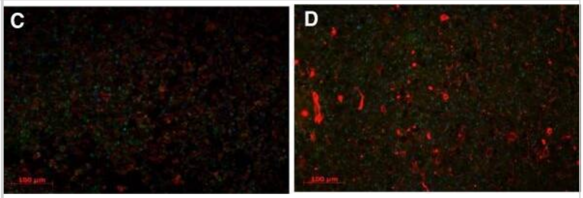


Immunocytochemistry/Immunofluorescence: ANP32B Antibody [NB100-1199] - LPS/IFN gamma-stimulated neuron-glial co-cultures (Glia/PAL31+ neuron) showing expression of both iNOS and PAL31. Image collected and cropped by CiteAb from the following publication (jbiomedsci.com/content/21/1/60), licensed under a CC-BY license.	
Immunohistochemistry: ANP32B Antibody [NB100-1199] - (C) Representative micrograph showing colocalization of upregulated PAL31 (green) with microglia/macrophage (ED1 positive cells) (D) Representative micrograph showing colocalization of upregulated PAL31 with astroglia (GFAP positive cells). (E) High power image showing the colocalization of upregulated PAL31 with ED1 positive macrophage/microglia (arrowhead) (F) High power image demonstrating the colocalization of upregulated PAL31 with GFAP positive astroglia (arrow). Magnification: 200X (A-D) and 1000X (E&F). Image collected and cropped by CiteAb from the following publication (jbiomedsci.com/content/21/1/60), licensed under a CC-BY license.	
Western Blot: ANP32B Antibody [NB100-1199] - (0.1 ug/ml) staining of NIH3T3 cell lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.	
Immunohistochemistry-Paraffin: ANP32B Antibody [NB100-1199] - Staining of paraffin embedded Human Breast. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.	

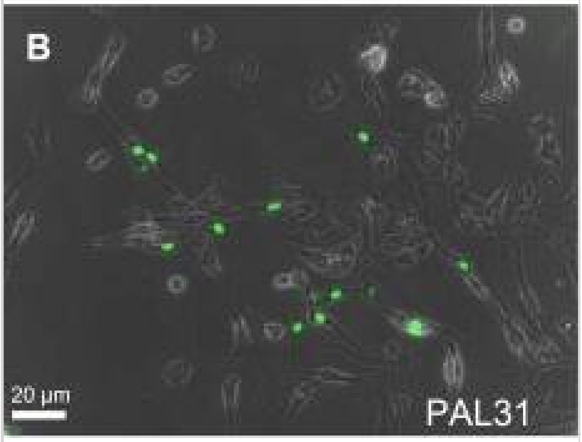
Knockdown Validated: ANP32B Antibody [NB100-1199] - Western blot analysis of pal31 siRNA-treated C6 showing knockdown of PAL31 expression by PAL31 silencer using 41.5 (lane1), 83 (lane2), and 166 (lane 3) picomole of pal31 siRNA or 332 picomole negative control. Actin works as a loading control. Image collected and cropped by CiteAb from the following publication (jbiomedsci.com/content/21/1/60), licensed under a CC-BY license.



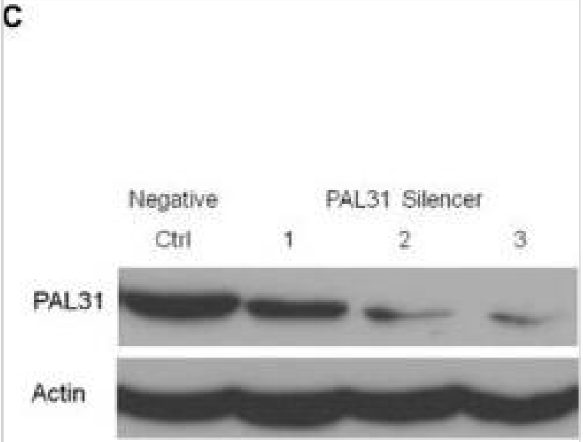
Immunocytochemistry/ Immunofluorescence: ANP32B Antibody [NB100-1199] - Upregulated PAL31 expression was observed not only in microglia/ macrophage but also in glial cells near the injury site. (A) Normal thoracic spinal cord section showing few ED-1 positive cells (red). (B) Normal thoracic spinal cord section showing GFAP positive cells (red). (C) Representative micrograph showing colocalization of upregulated PAL31 (green) with microglia/macrophage (ED1 positive cells) (D) Representative micrograph showing colocalization of upregulated PAL31 with astroglia (GFAP positive cells). (E) High power image showing the colocalization of upregulated PAL31 with ED1 positive macrophage/microglia (arrowhead) (F) High power image demonstrating the colocalization of upregulated PAL31 with GFAP positive astroglia (arrow). Magnification: 200X (A-D) & 1000X (E&F). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25034417), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



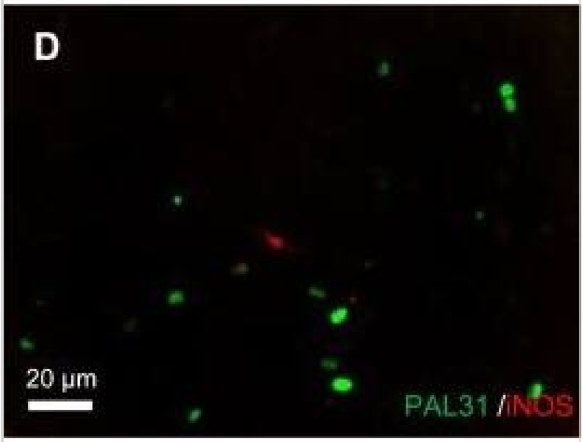
Immunocytochemistry/ Immunofluorescence: ANP32B Antibody [NB100-1199] - Overexpression of PAL31 in C6 did not affect the cell proliferative activity. (A) GFP/bright field-superimposed micrograph in GFP overexpressing cells showing > 50% transfective efficiency (B) GFP-PAL31/bright field-micrograph in PAL31 overexpressing C6 showing correct nuclear localization of GFP-tagged PAL31 & transfection effeciency. (C) Western blot analysis showing the expression of GFP (~27 kDa), GFP-tagged PAL31 (~58 kDa), PCNA (~34 kDa), endogenous PAL31 (~31 kDa) & Actin (~43 kDa) in GFP- or PAL31-C6 cultures. The level of PCNA, a protein expressing in nuclear during DNA synthesis, in cells did not alter after overexpression of GFP or GFP-tagged PAL31. Actin works as a loading control. (D) MTT assay in the transfected cells at 4 different time intervals (from Ctrl to 72 hours). Ctrl represents the cells after subculture & overnight incubation. The data in each time points were analyzed by two-way ANOVA & Bonferroni post hoc test. No significance, compared GFP & GFP tagged PAL31 groups. n = 3. Magnification 100X (A-B). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25034417), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

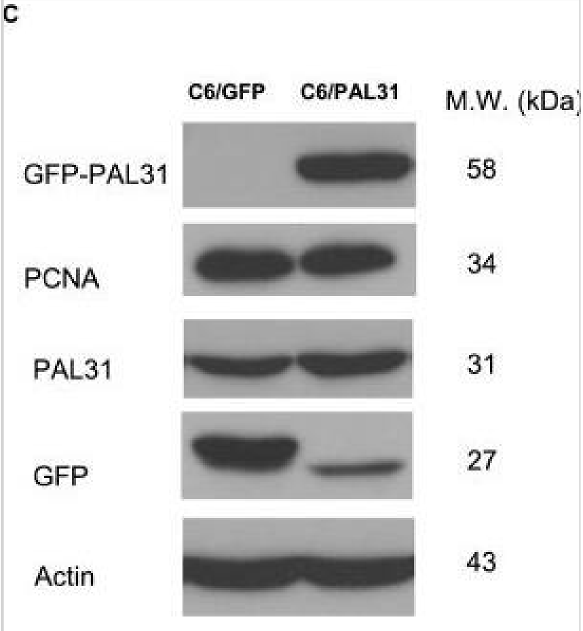


Western Blot: ANP32B Antibody [NB100-1199] - Effect of overexpression or knockdown of PAL31 in C6 on H2O2-induced toxicity. (A) Representative micrographs showing C6 overexpressing GFP or GFP-tagged PAL31 after being treated with H2O2 (0 ~ 1 mM) for 4 hours. (B) MTT assay in GFP- or GFP-PAL31-overexpressed C6 after H2O2 treatment showing significant difference (cytoprotective effect of PAL31) at 0.5 mM & 1 mM H2O2 treatment between C6/GFP & C6/PAL31 groups. The data in each dosage were analyzed by two-way ANOVA & Bonferroni post hoc test. *P < 0.05, GFP (+H2O2) compared to PAL31 (+H2O2), n = 4, at 0.5 mM & 1 mM. (C) Western blot analysis of pal31 siRNA-treated C6 showing knockdown of PAL31 expression by PAL31 silencer using 41.5 (lane1), 83 (lane2), & 166 (lane 3) picomole of pal31 siRNA or 332 picomole negative control. Actin works as a loading control. (D) MTT assay in Negative- or PAL31 silencer transfected C6 after H2O2 treatment showing significant difference at 1 mM H2O2 treatment between C6/Negative & C6/PAL31 siRNA groups. *P < 0.05, Negative (+H2O2) compared to PAL31 siRNA (+H2O2), n = 4. Magnification 100X (A). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25034417), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: ANP32B Antibody [NB100-1199] - Overexpression of PAL31 in mixed glial culture effectively reduced LPS/IFNγ stimulation after co-culture with spinal cord neuron-glial cultures. (A) ED-1- immunoreactive microglia/macrophage in confluent mixed glial cultures (B) S100- immunoreactive astroglia in confluent mixed glial cultures (C) LPS/IFNγ-stimulated neuron-glial co-cultures (Glia/GFP + neuron) showing expression of both iNOS & GFP (D) LPS/IFNγ-stimulated neuron-glial co-cultures (Glia/PAL31+ neuron) showing expression of both iNOS & PAL31. (E) Quantitative analysis of released nitric oxide, as a form of nitrite, in LPS/IFNγ-stimulated or non-stimulated neuron-glial co-culture. Mixed glial cultures were transfected with pGFP or pPAL31 before seeding spinal cord neurons. Co-cultures were then treated with LPS/IFNγ for 2 days. Medium were saved for nitrite level determination, while cells were processed for immunostaining with iNOS. *P < 0.05, n = 4. PAL31 overexpressing co-cultures (+LPS/IFNγ) compared to GFP overexpressing co-cultures (+LPS/IFNγ). Magnification 200X (A-D). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25034417), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: ANP32B Antibody [NB100-1199] - Overexpression of PAL31 in C6 did not affect the cell proliferative activity. (A) GFP/bright field-superimposed micrograph in GFP overexpressing cells showing > 50% transfective efficiency (B) GFP-PAL31/bright field-micrograph in PAL31 overexpressing C6 showing correct nuclear localization of GFP-tagged PAL31 & transfection effeciency. (C) Western blot analysis showing the expression of GFP (~27 kDa), GFP-tagged PAL31 (~58 kDa), PCNA (~34 kDa), endogenous PAL31 (~31 kDa) & Actin (~43 kDa) in GFP- or PAL31-C6 cultures. The level of PCNA, a protein expressing in nuclear during DNA synthesis, in cells did not alter after overexpression of GFP or GFP-tagged PAL31. Actin works as a loading control. (D) MTT assay in the transfected cells at 4 different time intervals (from Ctrl to 72 hours). Ctrl represents the cells after subculture & overnight incubation. The data in each time points were analyzed by two-way ANOVA & Bonferroni post hoc test. No significance, compared GFP & GFP tagged PAL31 groups. n = 3. Magnification 100X (A-B). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25034417), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Publications

Zhu L, Perlaky L, Henning D, Valdez BC. Cloning and characterization of a new silver-stainable protein SSP29, a member of the LRR family. Biochem Mol Biol Int 1997-08-01 [PMID: 9285060]

Tseng Fan-Wei, Liou Dann-Ying, Tsai May-Jywan et al. Cytoprotective and anti-inflammatory effects of PAL31 overexpression in glial cells. J Biomed Sci. 2014-07-17 [PMID: 25034417] (WB, Rat)

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HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

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