Product Datasheet

NSFL1C Antibody - BSA Free
NBP2-13677

Unit Size: 0.1 ml

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

www.novusbio.com technical@novusbio.com

Publications: 3

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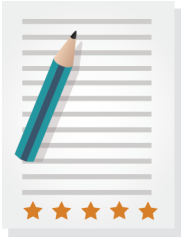
www.novusbio.com/NBP2-13677

Updated 2/23/2025 v.20.1



NBP2-13677

NSFL1C 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

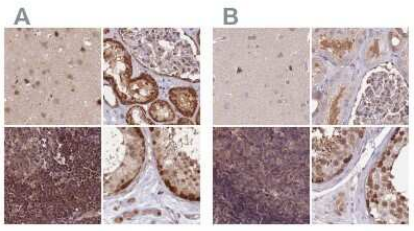
Host	Rabbit
Gene ID	55968
Gene Symbol	NSFL1C
Species	Human
Immunogen	This antibody was developed against a recombinant protein corresponding to the amino acids: EEEEGQRFYAGGSERSGQQIVGPPRKKSPNELVDDLFKGAKEHGAVAVERVTKSPGETSKPRPFAGGGYRLG

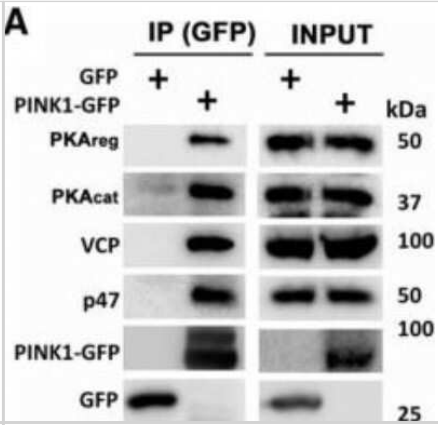
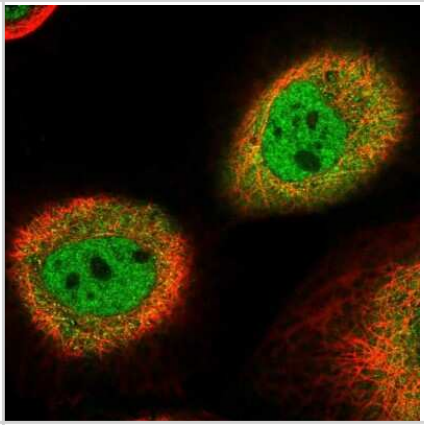
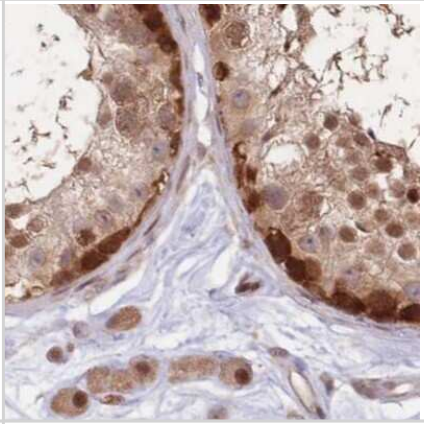
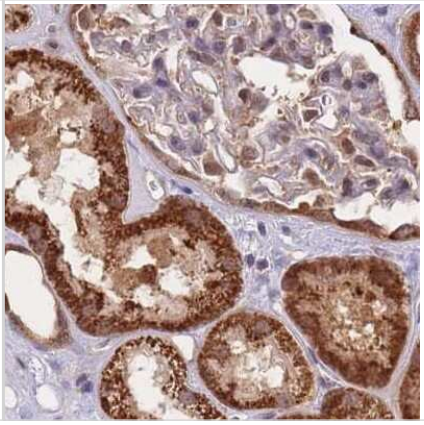
Product Application Details

Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.04 - 0.4 ug/ml, Immunohistochemistry 1:1000 - 1:2500, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:1000-1:2500
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. ICC/IF Fixation Permeabilization: Use PFA/Triton X-100.

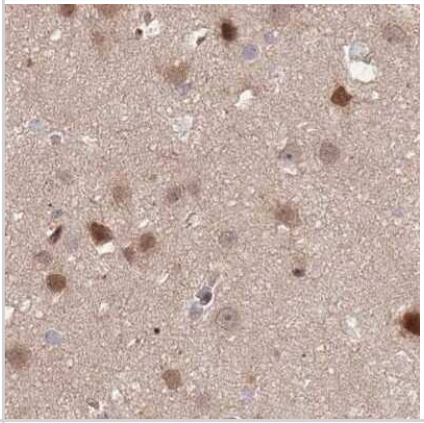
Images

Immunohistochemistry-Paraffin: NSFL1C Antibody [NBP2-13677] - Staining of human cerebral cortex, kidney, lymph node and testis using Anti-NSFL1C antibody NBP2-13677 (A) shows similar protein distribution across tissues to independent antibody NBP2-13676 (B).

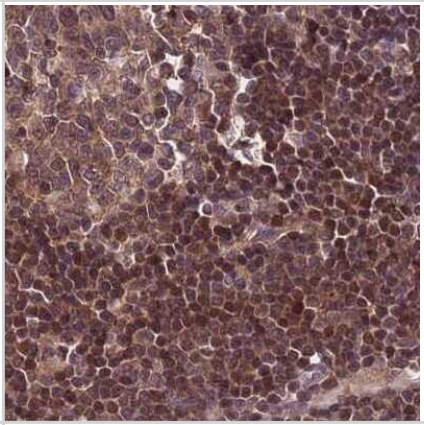


Western Blot: NSFL1C Antibody [NBP2-13677] - PINK1 phosphorylates the activation loop of PKA. Immunoprecipitation products of HEK293 cell lysates expressing GFP or PINK1-GFP reveal that PINK1 pulls down the PKA holoenzyme (PKAcat and PKAreg) in addition to VCP and NSFL1C. Image collected and cropped by CiteAb from the following publication (https://eneuro.org/lookup/doi/10.1523/ENEURO.0466-18.2018), licensed under a CC-BY license.	
Immunocytochemistry/Immunofluorescence: NSFL1C Antibody [NBP2-13677] - Staining of human cell line A-431 shows localization to nucleoplasm & cytosol. Antibody staining is shown in green.	
Immunohistochemistry-Paraffin: NSFL1C Antibody [NBP2-13677] - Staining of human testis.	
Immunohistochemistry-Paraffin: NSFL1C Antibody [NBP2-13677] - Staining of human kidney.	

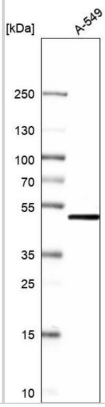
Immunohistochemistry-Paraffin: NSFL1C Antibody [NBP2-13677] - Staining of human cerebral cortex.



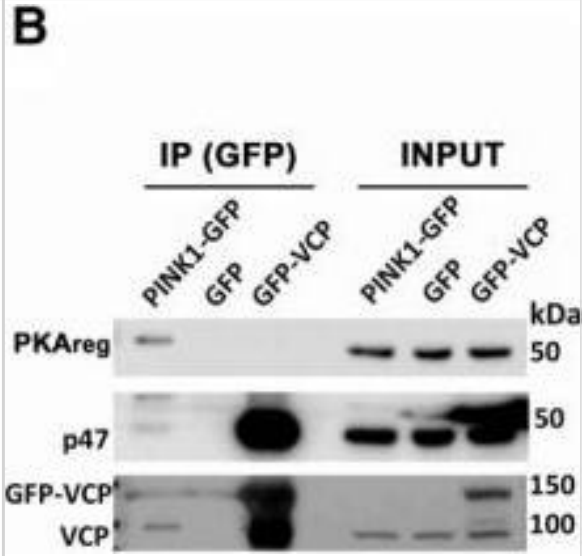
Immunohistochemistry-Paraffin: NSFL1C Antibody [NBP2-13677] - Staining of human lymph node.



Western Blot: NSFL1C Antibody [NBP2-13677] - Analysis in human cell line A-549.



Western Blot: NSFL1C Antibody [NBP2-13677] - PINK1 phosphorylates the activation loop of PKA. A, IP products of HEK293 cell lysates expressing GFP or PINK1-GFP reveal that PINK1 pulls down the PKA holoenzyme (PKAcat & PKAreg) in addition to VCP & p47. B, IP products of HEK293 lysates expressing PINK1-GFP, GFP or GFP-VCP reveal that either PINK1 or VCP pull down p47, but only PINK1 pulls down PKAreg. C, IP products of HEK293 lystates expressing Vector or MYC-p47 reveals that p47 does not interact w/ PKAcat or PKAreg. D, 2-D analysis of endogenous PKA subunits in control (M14) & PINK1-3xFlag (#24) stable SH-SY5Y lines reveal an acidic shift of PKAcat (arrow), but not PKAreg, in PINK1-overexpressing cells. E, Structural model for the MD-equilibrated (100 ns) complex between hPINK1 (pink) & PKAcat (green). PKA-T197 (cyan balls) & PINK1-D362 (orange balls) are shown in relation to PINK1-bound ATP w/ two Mg2+ (purple). Red, tan, white, cyan, & blue represent O, P, H, C, & N atoms, respectively, of ATP. F, Immunoblot analysis of HEK293 cells transfected w/ GFP or PINK1-GFP reveals that PINK1-GFP increases PKAcat phosphorylation at T197, but has no effect on PKAreg phosphorylation at S99 (mean ± SD, three independent experiments, p = 0.014). G, Recombinant PKAcat purified from E. coli, which is already phosphorylated at T197, dephosphorylated by incubation w/ λ phosphatase (PP) at 30°C × 1 h. Successful dephosphorylation verified by immunoblot. H, In vitro kinase assay of human GST-PINK1 w/ dephosphorylated recombinant PKAcat in the presence or absence of the PKA inhibitor H89 reveals that hPINK1 phosphorylates PKA at T197. I, In vitro kinase assay of GST-TcPINK1 w/ dephosphorylated recombinant PKAcat reveals that TcPINK1 is also capable of directly phosphorylating PKAcat. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30783609), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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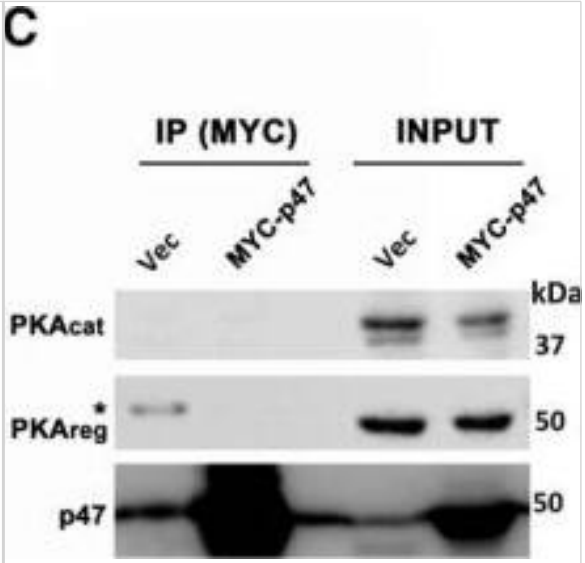

Publications

Mirsanaye A, Hoffmann S, Weisser M et al. VCF1 is an unconventional p97/VCP cofactor promoting recognition of ubiquitylated p97-UFD1-NPL4 substrates bioRxiv 2023-07-26 (IP)

Details:
0.5 µg/sample

Shearer RF, Typas D, Coscia F et al. K27-linked ubiquitylation promotes p97 substrate processing and is essential for cell proliferation The EMBO journal 2022-05-02 [PMID: 35349166] (WB, ICC/IF, Human)

Wang K Z Q, Steer E et al. PINK1 Interacts with VCP/p97 and Activates PKA to Promote NSFL1C/p47 Phosphorylation and Dendritic Arborization in Neurons. Eneuro 2019-02-21 [PMID: 30783609] (WB, Human)

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Products Related to NBP2-13677

NBP2-13677PEP	NSFL1C Recombinant Protein Antigen
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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