

Product Datasheet

Neurokinin B Antibody - BSA Free NB300-201

Unit Size: 0.1 ml

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

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NB300-201

Neurokinin B Antibody - BSA Free

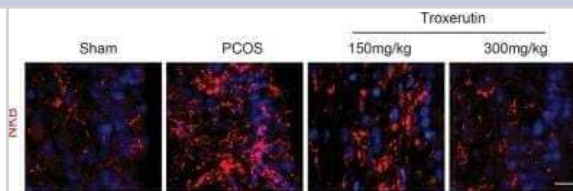
Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description	
Host	Rabbit
Gene ID	6866
Gene Symbol	TAC3
Species	Human, Mouse, Rat
Immunogen	A synthetic peptide made to an internal sequence of mouse proNeurokinin B (~93% homology to the rat sequence). [UniProt# P55099]

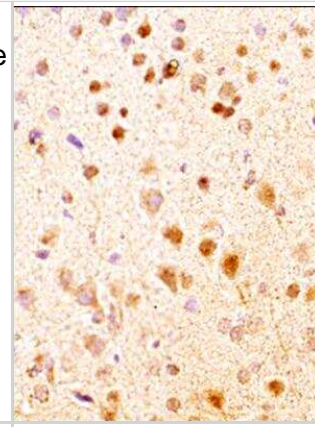
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:100-1:2000, Immunohistochemistry 1:100-1:1000, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunohistochemistry-Paraffin 1:100-1:1000, Immunohistochemistry-Frozen 1:500-1:1000
Application Notes	This Neurokinin B antibody is useful for Immunocytochemistry/Immunofluorescence and Immunohistochemistry on paraffin-embedded and frozen sections. This antibody has been used on human hypothalamus and rat brain sections. In IHC, positive staining of the arcuate nucleus is seen. There has been customer feedback that this antibody works in Western blot; please note that this is a secreted protein.

Images

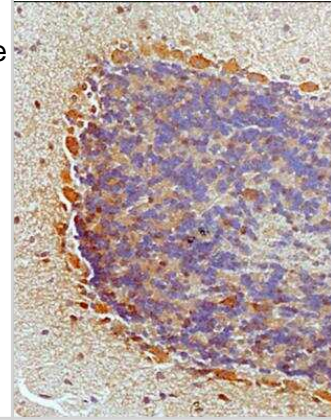
Immunohistochemistry: Neurokinin B Antibody - BSA Free [NB300-201] - Immunofluorescence photomicrograph showing that the expression of Neurokinin B in the arcuate nucleus (ARC). Scale bars: 20 um. Image collected and cropped by CiteAb from the following publication ([//pubmed.ncbi.nlm.nih.gov/32921318/](https://pubmed.ncbi.nlm.nih.gov/32921318/)) licensed under a CC-BY license.



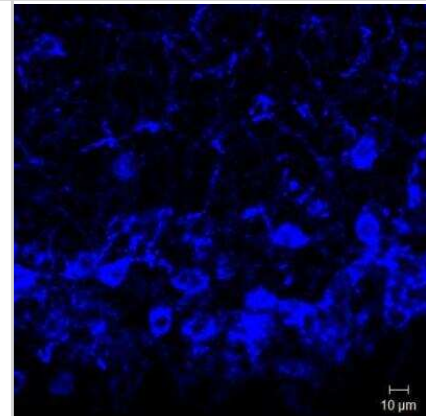
Immunohistochemistry-Paraffin: Neurokinin B Antibody [NB300-201] - IHC analysis of formalin fixed paraffin embedded tissue section of mouse brain using Neurokinin B antibody at 1:200 dilution. The antibody depicted an expected strong cytoplasmic staining in the neuronal cells.



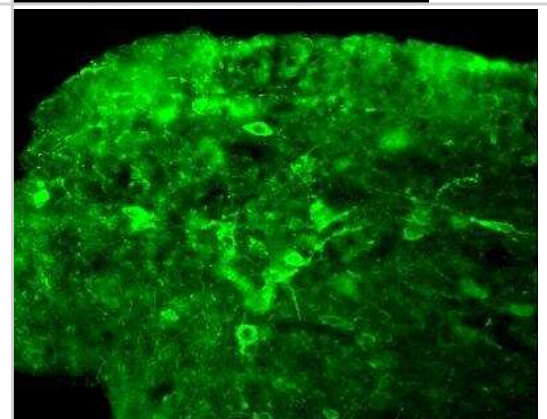
Immunohistochemistry-Paraffin: Neurokinin B Antibody [NB300-201] - IHC analysis of formalin fixed paraffin embedded tissue section of mouse brain using Neurokinin B antibody at 1:100 dilution. The antibody showed a specific cytoplasmic staining in the Purkinje cells and some granular neurons from the granular layer with weak signal in the fibers within the molecular layer of the section.



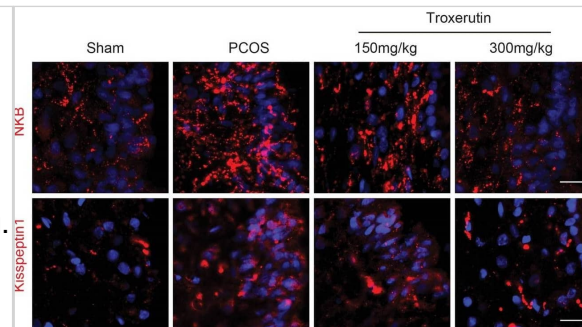
Immunohistochemistry: Neurokinin B Antibody [NB300-201] - IF analysis of Neurokinin B in mouse hypothalamus. Image courtesy of an anonymous customer review.



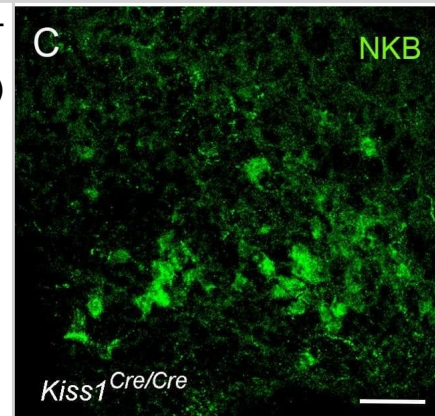
Immunohistochemistry: Neurokinin B Antibody [NB300-201] - Detection of Neurokinin B in rat brain tissue (Alexa 488 stain), using NB 300-201.



Immunocytochemistry/ Immunofluorescence: Neurokinin B Antibody - BSA Free [NB300-201] - Troxerutin reduced the expression of Kisspeptin1 & Neurokinin B in the ARC. a Immunofluorescence photomicrograph showing that the expression of Kisspeptin1 & NKB in the arcuate nucleus (ARC). Scale bars:20 μ m. b A lower magnification image showing the whole ARC & median eminence. Rectangular frame a & b represent ARC & median eminence (ME) analyzed in Fig. 5a & Fig. 6a, respectively. Scale bars:200 μ m. c Quantitative analysis of integral optical density (IOD) of Kisspeptin1 & NKB in the ARC. P values were determined by one-way ANOVA with Tukey's multiple comparison test & data were presented as means \pm s.e.m. n = 4 per group. **P < 0.01, ***P < 0.001 vs. sham group; #P < 0.05, ##P < 0.01 vs. PCOS group Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32921318>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunohistochemistry: Neurokinin B Antibody - BSA Free [NB300-201] - Characterization of Kiss1-null mice.(A-C) Immunofluorescence for kisspeptin (A,B) & NKB (C) in the ARN of wild-type (A) & Kiss1-null (B,C) female mice. (D) Cell-attached recordings showing the effects of 100 nM NKB on firing of KNDy neurons in acute brain slices prepared from female heterozygous Kiss1Cre/+ and homozygous (null) Kiss1Cre/Cre;Rosa26-tdT mice. (E) Mean \pm SEM changes in KNDy neuron firing evoked by 100 nM NKB in heterozygous Kiss1Cre/+and homozygous (null) Kiss1Cre/Cre;Rosa26-tdT mice. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/33464205>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

L Naulé, A Mancini, SA Pereira, BM Gassaway, JR Lydeard, JC Magnotto, HK Kim, J Liang, C Matos, SP Gygi, FT Merkle, RS Carroll, AP Abreu, UB Kaiser MKRN3 inhibits puberty onset via interaction with IGF2BP1 and regulation of hypothalamic plasticity JCI Insight, 2023-04-24;8(8):. 2023-04-24 [PMID: 37092553]

Roberts SA, Naulé L, Chouman S et al. Hypothalamic Overexpression of Makorin Ring Finger Protein 3 Results in Delayed Puberty in Female Mice Endocrinology 2022-08-17 [PMID: 35974456]

Gao Z, Ma X, et al. Troxerutin protects against DHT-induced polycystic ovary syndrome in rats. J Ovarian Res 2020-09-13 [PMID: 32921318] (IF/IHC, Rat)

Liu, X, Yeo, S H Et al. Highly redundant neuropeptide volume co-transmission underlying episodic activation of the GnRH neuron dendron. Elife 2021-01-19 [PMID: 33464205] (WB, Human)

Senft RA, Freret ME, Sturrock N, Dymecki SM Neurochemically and hodologically distinct ascending VGLUT3 versus serotonin subsystems comprise the r2-Pet1 median raphe The Journal of neuroscience : the official journal of the Society for Neuroscience 2021-02-05 [PMID: 33547164]

Sakata D, Uruno T et al. Selective role of neurokinin B in IL-31-induced itch response in mice. J Allergy Clin Immunol 2019-01-10 [PMID: 31405606] (IF/IHC, Mouse)

Chen S, Gao XF, Zhou Y et al. A spinal neural circuitry for converting touch to itch sensation Nat Commun 2020-10-08 [PMID: 33033265] (IHC-Fr, Mouse)

Dees WL, Hiney JK, Srivastava VK Regulation of prepubertal dynorphin secretion in the medial basal hypothalamus of the female rat J. Neuroendocrinol. 2019-12-01 [PMID: 31715027] (WB, Rat)

Srivastava Vinod K, Hiney Jill K, Dees William L et al. Alcohol Delays the Onset of Puberty in the Female Rat by Altering Key Hypothalamic Events. Alcoholism, Clinical and Experimental Research 2018-07-01 [PMID: 29689132] (WB, Rat)

Fergani C, Leon S, Padilla SL et al. NKB signaling in the posterodorsal medial amygdala stimulates gonadotropin release in a kisspeptin-independent manner in female mice Elife 2018-12-19 [PMID: 30565563] (IHC-Fr, Mouse)

Kanaya M, Iwata K, Ozawa H. Distinct dynorphin expression patterns with low- and high-dose estrogen treatment in the arcuate nucleus of female rats. Biol. Reprod. 2017-10-24 [PMID: 29069289] (Rat)

Osuka S, Iwase A, Nakahara T et al. Kisspeptin in the hypothalamus of two rat models of polycystic ovary syndrome. Endocrinology. 2016-12-16 [PMID: 27983870] (Rat)

More publications at <http://www.novusbio.com/NB300-201>

Procedures

Immunohistochemistry-Paraffin Protocol for Neurokinin B Antibody (NB300-201)

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes (keep slides in the sodium citrate buffer at all times).

Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in PBS for 5 minutes.
3. Block each section with 100-400 ul blocking solution (1% BSA in PBS) for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul HRP polymer conjugated secondary antibody. Incubate 30 minutes at room temperature.
7. Wash sections three times in wash buffer for 5 minutes each.
8. Add 100-400 ul DAB substrate to each section and monitor staining closely.
9. As soon as the sections develop, immerse slides in deionized water.
10. Counterstain sections in hematoxylin.
11. Wash sections in deionized water two times for 5 minutes each.
12. Dehydrate sections.
13. Mount coverslips.





Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NB300-201

NBL1-16669	Neurokinin B Overexpression Lysate
NB300-201PEP	Neurokinin B Antibody Blocking Peptide
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.

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