

Product Datasheet

NK3R/TACR3/Neurokinin B Receptor Antibody NB300-102

Unit Size: 0.15 ml

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

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NB300-102**NK3R/TACR3/Neurokinin B Receptor Antibody**

Product Information	
Unit Size	0.15 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.1% Sodium Azide
Isotype	IgG
Purity	Unpurified
Buffer	Whole antisera
Product Description	
Host	Rabbit
Gene ID	6870
Gene Symbol	TACR3
Species	Mouse, Rat, Guinea Pig, Sheep, Human (Negative)
Reactivity Notes	Rat, mouse and guinea pig in brain, spinal cord and ileum. Customer feedback suggests that human reactivity is negative. Sheep reactivity reported in scientific literature (PMID: 19912479).
Specificity/Sensitivity	NB300-102 is specific to the NK-3 receptor. Specificity was verified by the localization of immunohistochemical staining as well as pre-absorption studies with NK-3 peptide. (1)
Immunogen	A synthetic peptide at the C-terminus of rat Neurokinin B Receptor, conjugated to bovine thyroglobulin. [UniProt# P16177]
Product Application Details	
Applications	Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry Free-Floating, Western Blot (Negative)
Recommended Dilutions	Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500. Use reported in scientific literature (PMID 30565563), Western Blot (Negative), Immunohistochemistry Free-Floating reported in scientific literature (PMID 25496429)
Application Notes	It is not useful for Western blot.

Publications

Ashley N Lindo, Jennifer F Thorson, Michelle N Bedenbaugh, Richard B McCosh, Justin A Lopez, Samantha A Young, Lanny J Meadows, Elizabeth C Bowdridge, Chrysanthi Fergani, Bradley A Freking, Michael N Lehman, Stanley M Hileman, Clay A Lents Localization of kisspeptin, NKB, and NK3R in the hypothalamus of gilts treated with the progestin altrenogest. *Biology of reproduction* 2022-01-03 [PMID: 34037695]

Persephone A Miller, Jesukhogie G Williams-Ikhenoba, Aditi S Sankhe, Brendan H Hoffe, Melissa J Chee Neuroanatomical, electrophysiological, and morphological characterization of melanin-concentrating hormone cells coexpressing cocaine- and amphetamine-regulated transcript. *The Journal of comparative neurology* 2024-02-14 [PMID: 38335050]

Kodani Y, Kawata M, Suga H et al. Characterization of Hypothalamic MCH Neuron Development in a 3D Differentiation System of Mouse Embryonic Stem Cells *eNeuro* [PMID: 35437265]

Edvinsson JC, Reducha PV, Sheykhzade M et al. Neurokinins and their receptors in the rat trigeminal system: Differential localization and release with implications for migraine pain *Molecular pain* 2021-12-13 [PMID: 34898306] (IHC-Fr, Rat)

Lopez, J A, Bowdridge, E C Et al. Morphological and functional evidence for sexual dimorphism in neurokinin B signalling in the retrochiasmatic area of sheep. *J Neuroendocrinol* 2020-07-01 [PMID: 32572994] (IF/IHC, Mouse)

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)

Goodman R L, He W et al. Evidence That the LH Surge in Ewes Involves Both Neurokinin B-Dependent and -Independent Actions of Kisspeptin. *Endocrinology* 2019-01-12 [PMID: 31599937] (IF/IHC, Sheep)

Yin C, Ishii T, Kaneda M Two Types of Cl Transporters Contribute to the Regulation of Intracellular Cl Concentrations in ON- and OFF-type Bipolar Cells in the Mouse Retina *Neuroscience* 2020-06-10 [PMID: 32531472] (IF/IHC, Mouse)

Chen SL, Liu YG, Zhou YT et al. Morphological and Functional Evidence of Sexual Dimorphism in the Retrochiasmatic Area Population of NK3R-containing Neurons in Sheep Thesis (IHC-FrFI, Sheep)

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)

Hsu YW, Morton G, Guy EG et al. Dorsal Medial Habenula Regulation of Mood-Related Behaviors and Primary Reinforcement by Tachykinin-Expressing Habenula Neurons *eNeuro* 2016-08-02 [PMID: 27482535]

Nivison-Smith L, Sun D, Fletcher EL et al. Mapping kainate activation of inner neurons in the rat retina. *J Comp Neurol* 2013-08-01 [PMID: 23348566] (Rat)

More publications at <http://www.novusbio.com/NB300-102>



Procedures

Immunohistochemistry Protocol specific for Neurokinin B Receptor Antibody (NB300-102)

Procedure Guide for NB 300-102 Polyclonal Anti-Neurokinin-3 (NK-B) Receptor
Immunohistochemistry

- 1) Tissue of interest is dissected and post-fixed in PBS containing 4% formaldehyde or PBS containing 4% formaldehyde + 0.1% glutaraldehyde**, followed by fixation in PBS containing 20% sucrose, overnight at 4C. Until the tissue sinks.
- 2) Cut fixed sections at 15 mm or 40 mm using a cryostat or sliding microtome, depending on incubation technique [for cryosections use 15 mm and for free-floating sections use 40 mm].
- 3) If using culture cells, remove media and perform 2-3 washed in PBS (pH 7.4) -use same protocol without agitation.
- 4) Wash sections in PBS for 10 minutes, 3 times.
- 5) Block the tissue with 1% BSA / 1% goat serum / 0.3% triton X-100 in 0.1M PBS, for 1 hour at RT.
- 6) Dilute anti-NK-3 receptor (NB 300-102) in blocking buffer at 1:1000 for cryosections and 1:5000 for free-floating sections.
- 7) Incubate sections overnight at 4C.
- 8) Wash sections in PBS for 10 minutes, 3 times.
- 9) Dilute secondary antibody (1:400 ?? Alexa 568 [Rho] goat anti-rabbit, from Molecular Probes, Inc.) in blocking buffer and incubate sections for 2 hours at RT.
- 10) Wash sections in PB (not PBS) for 10 minutes, 3 times.
- 11) Mount coverslips to slides using Fluoromount-G (Southern Biotech Assoc., cat# 0100-01)

**Note: Mouse dorsal horn and cerebral cortex were used as positive control section.

*Tissues fixed in 4% paraformaldehyde + 0.1% glutaraldehyde are used for EM analysis





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Products Related to NB300-102

NB300-102PEP	NK3R/TACR3/Neurokinin B Receptor 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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