

Datasheet for 600-401-DC1**NK3R Antibody****Overview**

Description:	Anti-NK3R (RABBIT) Antibody - 600-401-DC1
Item No.:	600-401-DC1
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	The tachykinins are a family of small peptides that include the neurotransmitters substance P, neurokinin A, and neurokinin B, which can act on three related but distinct seven transmembrane G-proteins coupled receptors, albeit at different concentrations. The NK-3 receptor (NK3R) has greatest affinity for neurokinin B and is highly expressed in the supraoptic and paraventricular nuclei. Following binding of its ligand, NK3R activates a phosphatidylinositol-calcium second messenger system. It is likely these signals lead to the release of vasopressin and oxytocin into the circulation. NK3R may be involved in learning and memory as mice lacking this gene expressed cognitive deficits compared to normal mice. Although it has been suggested that NK3R plays a role in the regulation of vagal afferent relay neurons, it is likely that these receptors are activated by substance P or neurokinin A, as the airway nerves do not express neurokinin B. NK3R antibody does not recognize NK1R or NK2R.
Synonyms:	NK3R Antibody, NKR, HH11, NK3R, NK-3R, TAC3RL, TAC3R, Neuromedin-K receptor, NK-3 receptor, NKR
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TACR3
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-NK3R antibody was prepared from whole rabbit serum produced by repeated immunizations with a 18 amino acid synthetic peptide from near the internal region of human NK3R.
Purity/Specificity:	Anti-NK3R Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with NK3R from other sources has not been determined.
Relevant Links:	• UniProtKB - P29371 • GenelD - 6870 • NCBI - P29371

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-NK3R Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 52 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000 - 1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	.5-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

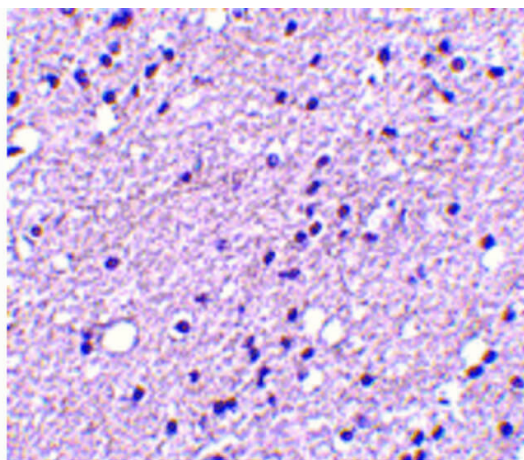
Shipping & Handling

Shipping Condition:	Wet Ice
----------------------------	---------

Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

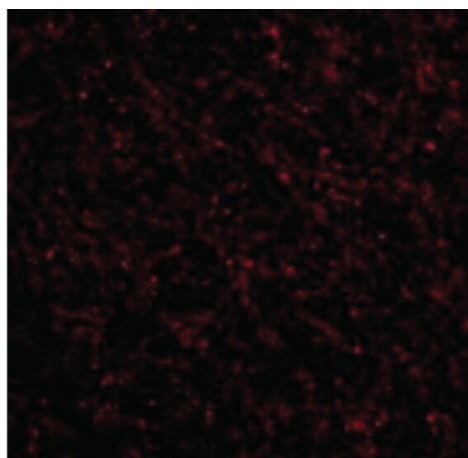
Expiration: Expiration date is one (1) year from date of receipt.

Images



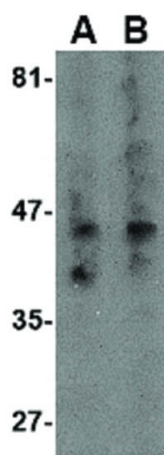
Immunohistochemistry

Immunohistochemistry of NK3R antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: NK3R antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: NK3R is nuclear and occasionally cytoplasmic. Staining: NK3R as precipitated red signal with hematoxylin purple nuclear counterstain.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of NK3R antibody. Tissue: Human brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: NK3R antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: NK3R as a red fluorescent signal.

**Western Blot**

Western Blot of NK3R antibody. Lane A: RAW264.7 cell lysate at 0.5 $\mu\text{g/mL}$. Lane B: RAW264.7 cell lysate at 1 $\mu\text{g/mL}$. Load: 35 μg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 52.2 kDa, ~45 kDa for NK3R. Other band(s): NK3R splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.