

Product datasheet for **TA306441**

Neurokinin 3 Receptor NK3 (TACR3) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 0.5 - 2 ug/mL, ICC: 5 ug/mL, IF: 20 ug/mL
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	NK3R antibody was raised against a 18 amino acid peptide from near the center of human NK3R.
Formulation:	PBS containing 0.02% sodium azide.
Concentration:	1ug/ul
Purification:	Affinity chromatography purified via peptide column
Conjugation:	Unconjugated
Storage:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	tachykinin receptor 3
Database Link:	NP_001050 Entrez Gene 21338 Mouse Entrez Gene 6870 Human P29371



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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:

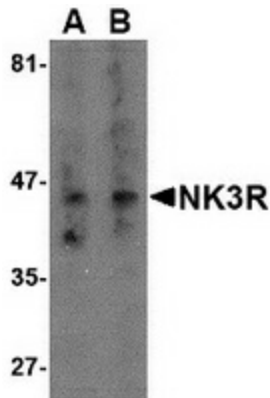
HH11; NK-3R; NK3R; NKR; TAC3RL

Protein Families:

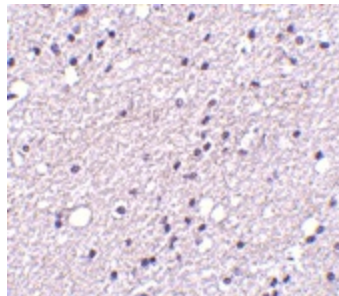
Druggable Genome, Transmembrane

Protein Pathways:

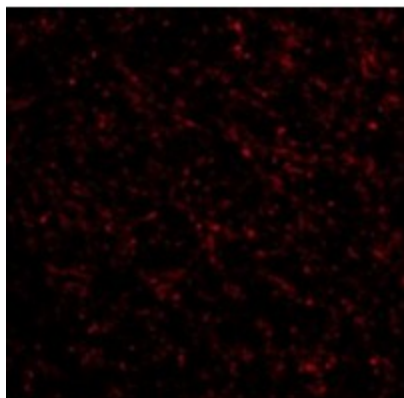
Calcium signaling pathway, Neuroactive ligand-receptor interaction

Product images:

Western blot analysis of NK3R in RAW264.7 cell lysate with NK3R antibody at (A) 0.5 and (B) 2 ug/ml.



Immunohistochemistry of NK3R in human brain tissue with NK3R antibody at 5 ug/ml.



Immunofluorescence of NK3R in Human Brain tissue with NK3R antibody at 20 ug/mL.