

Datasheet for ABIN2782749  
**anti-Reticulon 4 antibody (Middle Region)**[Go to Product page](#)**1** Image**1** Publication

## Overview

Quantity:	100 µL
Target:	Reticulon 4 (RTN4)
Binding Specificity:	Middle Region
Reactivity:	Human, Mouse, Rat, Dog, Rabbit, Sheep, Cow, Horse, Guinea Pig, Pig, Zebrafish (Danio rerio)
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Reticulon 4 antibody is un-conjugated
Application:	Western Blotting (WB)

## Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the middle region of human RTN4
Sequence:	FRIYKGVIIQA IQKSDEGHPF RAYLESEVAI SEELVQKYSN SALGHVNCTI
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 93%, Horse: 100%, Human: 100%, Mouse: 100%, Pig: 100%, Rabbit: 100%, Rat: 100%, Sheep: 100%, Zebrafish: 79%
Characteristics:	This is a rabbit polyclonal antibody against RTN4. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

## Target Details

Target:	Reticulon 4 (RTN4)
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## Target Details

Alternative Name: RTN4 ([RTN4 Products](#))

Background: RTN4 belongs to the family of reticulons. Reticulons are associated with the endoplasmic reticulum, and are involved in neuroendocrine secretion or in membrane trafficking in neuroendocrine cells. RTN4 is a potent neurite outgrowth inhibitor which may also help block the regeneration of the central nervous system in higher vertebrates. This gene belongs to the family of reticulon encoding genes. Reticulons are associated with the endoplasmic reticulum, and are involved in neuroendocrine secretion or in membrane trafficking in neuroendocrine cells. The product of this gene is a potent neurite outgrowth inhibitor which may also help block the regeneration of the central nervous system in higher vertebrates. Alternatively spliced transcript variants derived both from differential splicing and differential promoter usage and encoding different isoforms have been identified. This gene belongs to the family of reticulon encoding genes. Reticulons are associated with the endoplasmic reticulum, and are involved in neuroendocrine secretion or in membrane trafficking in neuroendocrine cells. The product of this gene is a potent neurite outgrowth inhibitor which may also help block the regeneration of the central nervous system in higher vertebrates. Alternatively spliced transcript variants derived both from differential splicing and differential promoter usage and encoding different isoforms have been identified.

Alias Symbols: ASY, NI220/250, NOGO, NOGO-A, NOGOC, NSP, NSP-CL, Nbla00271, Nbla10545, Nogo-B, Nogo-C, RTN-X, RTN4-A, RTN4-B1, RTN4-B2, RTN4-C

Protein Interaction Partner: HUWE1, SYT16, ZFYVE21, RTN4, SNX15, ARL6IP1, SNX1, UBC, RPA3, RPA2, RPA1, vpu, BAIAP2, LAMA4, ATF2, CLN8, TMEM65, S100A16, EPPK1, SNX12, ACAA2, SLC9A3R2, TJP1, HNRNPM, ILF3, IGFBP7, DDB1, SLC25A10, CIRBP, TERF1, POT1, RPS27, NR4A1, HLA-DPB1, RTN3, RTN4IP1

Protein Size: 392

Molecular Weight: 42 kDa

Gene ID: 57142

NCBI Accession: [NM\\_207520](#), [NP\\_997403](#)

UniProt: [Q9NQC3](#)

Pathways: [Neurotrophin Signaling Pathway](#), [Regulation of Cell Size](#), [SARS-CoV-2 Protein Interactome](#)

## Application Details

Application Notes: Optimal working dilutions should be determined experimentally by the investigator.

Comment: Antigen size: 392 AA

## Application Details

Restrictions: For Research Use only

## Handling

Format: Liquid

Concentration: Lot specific

Buffer: Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -20 °C

Storage Comment: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

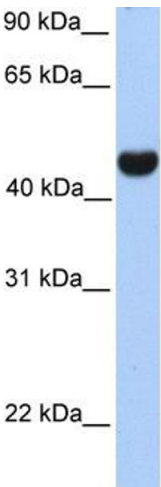
## Publications

Product cited in: Wanitchakool, Ousingsawat, Sirianant, Cabrita, Faria, Schreiber, Kunzelmann: "Cellular defects by deletion of ANO10 are due to deregulated local calcium signaling." in: **Cellular signalling**, Vol. 30, pp. 41-49, (2016) ([PubMed](#)).

Schreiber, Kunzelmann: "Expression of anoctamins in retinal pigment epithelium (RPE)." in: **Pflügers Archiv : European journal of physiology**, Vol. 468, Issue 11-12, pp. 1921-1929, (2016) ([PubMed](#)).

Hammer, Wanitchakool, Sirianant, Papiol, Monnheim, Faria, Ousingsawat, Schramek, Schmitt, Margos, Michel, Kraiczy, Pawlita, Schreiber, Schulz, Fingerle, Tumani, Ehrenreich, Kunzelmann: "A Coding Variant of ANO10, Affecting Volume Regulation of Macrophages, Is Associated with Borrelia Seropositivity." in: **Molecular medicine (Cambridge, Mass.)**, Vol. 21, pp. 26-37, (2015) ([PubMed](#)).

Tian, Schreiber, Kunzelmann: "Anoctamins are a family of Ca<sup>2+</sup>-activated Cl<sup>-</sup> channels." in: **Journal of cell science**, Vol. 125, Issue Pt 21, pp. 4991-8, (2013) ([PubMed](#)).



**Western Blotting**

**Image 1.** WB Suggested Anti-RTN4 Antibody Titration: 0.2-1 ug/ml Positive Control: Human brain