

# RIC3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12721b

## **Product Information**

| Application<br>Primary Accession | IHC-P, WB, E<br><u>Q7Z5B4</u> |
|----------------------------------|-------------------------------|
| Other Accession                  | <u>NP_001128581.1</u>         |
| Reactivity                       | Human                         |
| Host                             | Rabbit                        |
| Clonality                        | Polyclonal                    |
| Isotype                          | Rabbit IgG                    |
| Clone Names                      | RB32321                       |
| Calculated MW                    | 41092                         |
| Antigen Region                   | 313-341                       |

## **Additional Information**

| Gene ID            | 79608  |
|--------------------|--|
| Other Names        | Protein RIC-3, Resistant to inhibitor of cholinesterase 3, RIC3  |
| Target/Specificity | This RIC3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 313-341 amino acids from the C-terminal region of human RIC3.               |
| Dilution           | IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.  |
| Format             | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.<br>This antibody is purified through a protein A column, followed by peptide<br>affinity purification. |
| Storage            | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.  |
| Precautions        | RIC3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.   |

### **Protein Information**

| Name     | RIC3   |
|----------|--|
| Function | Molecular chaperone which facilitates proper subunit assembly and surface trafficking of alpha-7 (CHRNA7) and alpha-8 (CHRNA8) nicotinic acetylcholine receptors (PubMed: <u>12821669</u> , PubMed: <u>15504725</u> , PubMed: <u>16120769</u> , PubMed: <u>18691158</u> , PubMed: <u>32204458</u> ). May also promote functional |

|                   | expression of homomeric serotoninergic 5-HT3 receptors, and of heteromeric acetylcholine receptors alpha-3/beta-2, alpha-3/beta-4, alpha-4/beta-2 and alpha-4/beta-4.  |
|-------------------|--|
| Cellular Location | [Isoform 1]: Endoplasmic reticulum membrane; Single-pass membrane<br>protein   |
| Tissue Location   | Broadly expressed, with high levels in muscle, brain, heart, pancreas and<br>testis. In the central nervous system, highest levels are detected in the<br>cerebellum and pituitary gland Over-expressed in brains from patients with<br>bipolar disease or schizophrenia. Isoform 5 is predominantly expressed in the<br>brain |

## Background

RIC3 is a protein associated with nicotinic acetylcholine receptors (nAChRs), neurotransmitter-gated ion channels expressed at the neuromuscular junction and within the central and peripheral nervous systems, that can enhance functional expression of multiple nAChR subtypes (Lansdell et al., 2005 [PubMed 16120769]).[supplied by OMIM].

## References

Walstab, J., et al. J. Biol. Chem. 285(35):26956-26965(2010) Bailey, S.D., et al. Diabetes Care (2010) In press : Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Seredenina, T., et al. Biosci. Rep. 28(6):299-306(2008) Roncarati, R., et al. Assay Drug Dev Technol 6(2):181-193(2008)

#### Images





RIC3 Antibody (C-term) (Cat.

#AP12721b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of RIC3 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

RIC3 Antibody (C-term) (Cat. #AP12721b) western blot analysis in NCI-H292,A549,WiDr,MDA-MB453 cell line lysates (35ug/lane).This demonstrates the RIC3 antibody detected the RIC3 protein (arrow). Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.