RICH2 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10656B

Specification

RICH2 Antibody (C-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q17R89
Other Accession	F1LQX4, NP_055674.4
Reactivity	**Human**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**89247**
Antigen Region	**784-811**

RICH2 Antibody (C-term) - Additional Information

Gene ID 9912

Other Names
Rho GTPase-activating protein 44, NPC-A-10, Rho-type GTPase-activating protein RICH2, RhoGAP interacting with CIP4 homologs protein 2, RICH-2, ARHGAP44, KIAA0672, RICH2

Target/Specificity
This RICH2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 784-811 amino acids from the C-terminal region of human RICH2.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide 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
RICH2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

RICH2 Antibody (C-term) - Protein Information

Name ARHGAP44 ([HGNC:29096](#))

Synonyms KIAA0672, RICH2

Function GTPase-activating protein (GAP) that stimulates the GTPase activity of Rho-type GTPases. Thereby, controls Rho-type GTPases cycling between their active GTP-bound and inactive GDP-bound states. Acts as a GAP at least for CDC42 and RAC1 (PubMed:[11431473](#)). In neurons, is involved in dendritic spine formation and synaptic plasticity in a specific RAC1-GAP activity (By similarity). Limits the initiation of exploratory dendritic filopodia. Recruited to actin- patches that seed filopodia, binds specifically to plasma membrane sections that are deformed inward by acto-myosin mediated contractile forces. Acts through GAP activity on RAC1 to reduce actin polymerization necessary for filopodia formation (By similarity). In association with SHANK3, promotes GRIA1 exocytosis from recycling endosomes and spine morphological changes associated to long-term potentiation (By similarity).

Cellular Location
Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q5SSM3}. Recycling endosome {ECO:0000250|UniProtKB:Q5SSM3}. Presynapse {ECO:0000250|UniProtKB:Q5SSM3}. Cell projection, dendrite {ECO:0000250|UniProtKB:F1LQX4}. Note=In CA1 hippocampal synapses, detected at both presynaptic and postsynaptic sites (By similarity) Located in convoluted dendritic plasma membrane sections enriched in polymerized actin and myosin (patches) along dendrites where often emerge filopodia (By similarity). {ECO:0000250|UniProtKB:F1LQX4, ECO:0000250|UniProtKB:Q5SSM3}
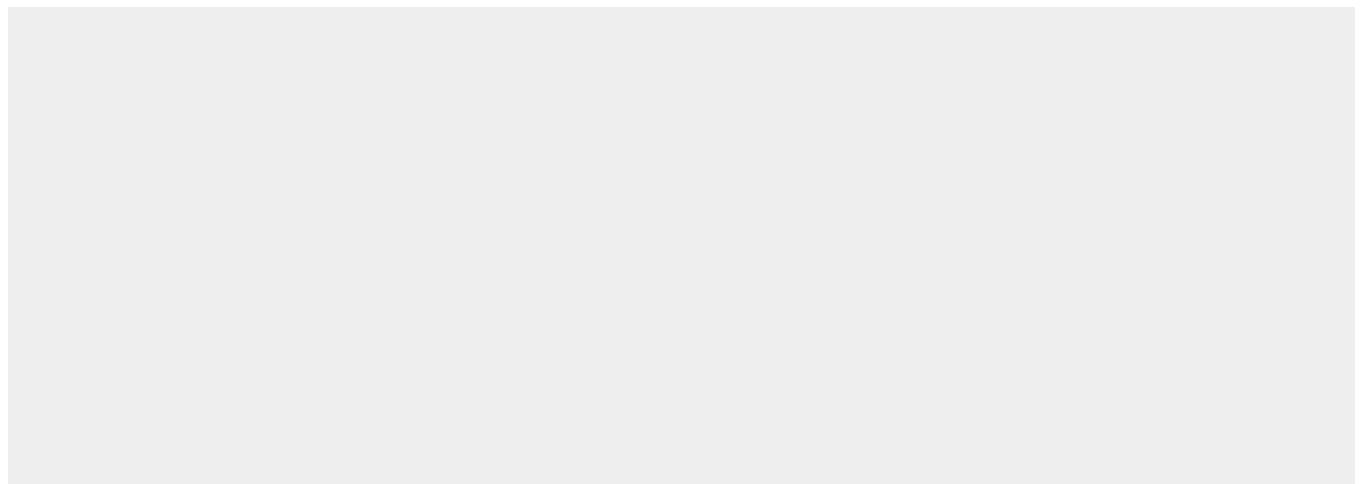
Tissue Location
Highly expressed in brain. Expressed at weak level in other tissues.

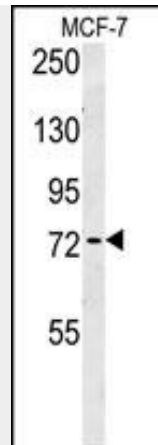## RICH2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.
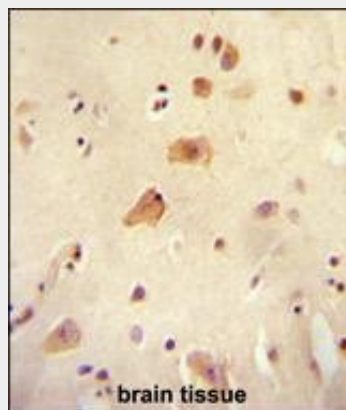
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytomety](#)
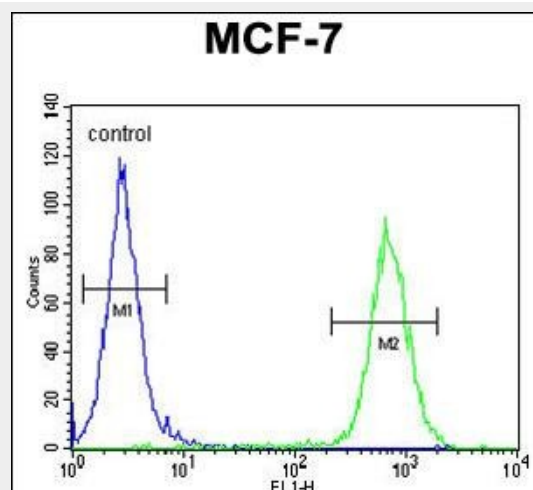- [Cell Culture](#)

RICH2 Antibody (C-term) - Images

RICH2 Antibody (C-term) (Cat. #AP10656b) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the RICH2 antibody detected the RICH2 protein (arrow).

RICH2 antibody (C-term) (Cat. #AP10656b) 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 the RICH2 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

RICH2 Antibody (C-term) (Cat. #AP10656b) flow cytometric analysis of MCF-7 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

RICH2 Antibody (C-term) - Background

GTPase activator for the Rho-type GTPases by converting them to an inactive GDP-bound state. Acts as a GTPase activitor in vitro for CDC42 and RAC1.

RICH2 Antibody (C-term) - References

Rollason, R., et al. J. Cell Biol. 184(5):721-736(2009)
Richnau, N., et al. J. Biol. Chem. 276(37):35060-35070(2001)