

## RIC-3 (Q-18): sc-54141

### BACKGROUND

RIC-3 (resistant to inhibitors of cholinesterase-3) is the mammalian homolog of the ric-3 protein from *C. elegans*. It contains two transmembrane domains and a coiled coil domain. RIC-3 is expressed in neurons and localizes to the endoplasmic reticulum where it plays a role in receptor folding and subunit assembly. In particular, RIC-3 is a nicotinic acetylcholine receptor (nAChR)-associated protein and it significantly enhances the subunit assembly, proper folding, stability and surface expression of several heteromeric and homomeric nAChR subtypes as well as some 5-HT<sub>3</sub> receptors. This suggests that RIC-3 may be an important regulator of receptor expression. Several isoforms exist for RIC-3 and they exhibit overlapping but distinct localizations. In addition, these isoforms may have various affects on receptor expression.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: RIC3 (human) mapping to 11p15.4; Ric3 (mouse) mapping to 7 E3.

### SOURCE

RIC-3 (Q-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RIC-3 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54141 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

RIC-3 (Q-18) is recommended for detection of RIC-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RIC-3 siRNA (h): sc-72301, RIC-3 siRNA (m): sc-72302, RIC-3 shRNA Plasmid (h): sc-72301-SH, RIC-3 shRNA Plasmid (m): sc-72302-SH, RIC-3 shRNA (h) Lentiviral Particles: sc-72301-V and RIC-3 shRNA (m) Lentiviral Particles: sc-72302-V.

Molecular Weight of RIC-3: 55 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **RIC-3 (G-8): sc-377408**, our highly recommended monoclonal alternative to RIC-3 (Q-18).