

Roquin (T-14): sc-162123

BACKGROUND

Roquin, also known as RC3H1 (RING finger and CCCH-type zinc finger domains 1) or RNF198 (RING finger protein 198), is a 1,133 amino acid protein that localizes to cytosolic RNA granules and contains one RING-type zinc finger and one C₃H₁-type zinc finger. Expressed ubiquitously with highest expression in liver, spleen, ovary and cerebellum, Roquin functions to repress the activity of ICOS (inducible T cell co-stimulator), an essential receptor for follicular T cells, thereby playing an important role in autoimmunity. Additionally, Roquin is thought to exhibit ubiquitin ligase activity and may regulate the ubiquitin-dependent control of AU-rich mRNA translation and stability. Two isoforms of Roquin exist due to alternative splicing events.

REFERENCES

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3. Heissmeyer, V., Ansel, K.M. and Rao, A. 2005. A plague of autoantibodies. *Nat. Immunol.* 6: 642-644.
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CHROMOSOMAL LOCATION

Genetic locus: RC3H1 (human) mapping to 1q25.1; Rc3h1 (mouse) mapping to 1 H2.1.

SOURCE

Roquin (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Roquin of human origin.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162123 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-162123 X, 200 µg/0.1 ml.

APPLICATIONS

Roquin (T-14) is recommended for detection of Roquin 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).

Roquin (D-14) is also recommended for detection of Roquin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Roquin siRNA (h): sc-78873, Roquin siRNA (m): sc-153064, Roquin shRNA Plasmid (h): sc-78873-SH, Roquin shRNA Plasmid (m): sc-153064-SH, Roquin shRNA (h) Lentiviral Particles: sc-78873-V and Roquin shRNA (m) Lentiviral Particles: sc-153064-V.

Roquin (T-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Roquin: 125 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.

RESEARCH USE

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