RISC (S-19): sc-55754



The Power to Question

BACKGROUND

Serine carboxypeptidases are members of the α/β hydrolase fold superfamily that participate, through three catalytic sites, in the hydrolysis of C-terminal residues in a variety of proteins. RISC (retinoid-inducible serine carboxypeptidase), also known as SCP1 or SCPEP1 (serine carboxypeptidase 1), is a 452 amino acid secreted protein that accumulates around the nuclear periphery and is thought to localize to lysosomes. As one of several members of the peptidase S10 family, RISC may be involved in maintaining both vascular wall and kidney homeostasis by deactivating endothelin (ET), a strong vasoconstrictor and mitogen. Two isoforms of RISC exist due to alternative splicing events.

REFERENCES

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- Mima, J., Suzuki, H., Takahashi, M. and Hayashi, R. 2002. Overexpression and functional characterization of a serine carboxypeptidase inhibitor (I^C) from Saccharomyces cerevisiae. J. Biochem. 132: 967-973.
- Potokina, E., Prasad, M., Malysheva, L., Röder, M.S. and Graner, A. 2006. Expression genetics and haplotype analysis reveal *cis* regulation of serine carboxypeptidase I (Cxp1), a candidate gene for malting quality in barley (Hordeum vulgare L.). Funct. Integr. Genomics 6: 25-35.
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CHROMOSOMAL LOCATION

Genetic locus: SCPEP1 (human) mapping to 17q22; Scpep1 (mouse) mapping to 11 C.

SOURCE

RISC (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RISC of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55754 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

RISC (S-19) is recommended for detection of RISC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

RISC (S-19) is also recommended for detection of RISC in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RISC siRNA (h): sc-62948, RISC siRNA (m): sc-62949, RISC shRNA Plasmid (h): sc-62948-SH, RISC shRNA Plasmid (m): sc-62949-SH, RISC shRNA (h) Lentiviral Particles: sc-62948-V and RISC shRNA (m) Lentiviral Particles: sc-62949-V.

Molecular Weight of RISC precursor: 51 kDa.

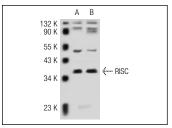
Molecular Weight of mature RISC: 35 kDa.

Positive Controls: PC-12 cell lysate: sc-2250 or mouse embryo extract: sc-364239.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



RISC (S-19): sc-55754. Western blot analysis of RISC expression in PC-12 whole cell lysate (**A**) and mouse embryo tissue extract (**B**).

PROTOCOLS

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