

CRHSP-24 (N-20): sc-49641

BACKGROUND

CRHSP-24 (calcium-regulated heat-stable protein 24) is a serine phosphoprotein originally identified as a physiological substrate for the Ca²⁺-calmodulin regulated protein phosphatase calcineurin (PP2B). An ubiquitously expressed protein, CRHSP-24 interacts with the STYX/dead phosphate protein in developing spermatids and is a paralog of the brain-specific mRNA-binding protein PIPPIN. It is thought to play a common role in calcium-mediated signal transduction resulting from phosphorylation on serine residues. CRHSP-24 is phosphorylated on Ser 52 by PKB α in response to IGF-1, on Ser 52 by PKB α and Rsk in response to EGF and on Ser 41 in the absence of IGF-1/EGF by a Dyrk isoform or another proline-directed protein kinase.

REFERENCES

1. Burnham, D.B., et al. 1982. Effects of carbachol, cholecystokinin and Insulin on protein phosphorylation in isolated pancreatic acini. *J. Biol. Chem.* 257: 10523-10528.
2. Groblewski, G.E., et al. 1998. Purification and characterization of a novel physiological substrate for calcineurin in mammalian cells. *J. Biol. Chem.* 273: 22738-22744.
3. Williams, J.A., et al. 1999. Intracellular regulatory mechanisms in pancreatic acinar cellular function. *Curr. Opin. Gastroenterol.* 15: 385.
4. Williams, J.A., et al. 2001. Intracellular signaling mechanisms activated by cholecystokinin-regulating synthesis and secretion of digestive enzymes in pancreatic acinar cells. *Annu. Rev. Physiol.* 63: 77-97.
5. Wishart, M.J. and Dixon, J.E. 2002. PTEN and myotubularin phosphatases: from 3-phosphoinositide dephosphorylation to disease. *Trends Cell Biol.* 12: 579-585.
6. Schäfer, C., et al. 2003. CRHSP-24 phosphorylation is regulated by multiple signaling pathways in acinar cells. *Am. J. Physiol. Gastrointest. Liver Physiol.* 285: 726-734.

CHROMOSOMAL LOCATION

Genetic locus: CARHSP1 (human) mapping to 16p13.2; Carhsp1 (mouse) mapping to 16 A1.

SOURCE

CRHSP-24 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CRHSP-24 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-49641 P, (100 μ g 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.

APPLICATIONS

CRHSP-24 (N-20) is recommended for detection of CRHSP-24 of human, mouse and, to a lesser extent, rat 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).

Suitable for use as control antibody for CRHSP-24 siRNA (h): sc-60443, CRHSP-24 siRNA (m): sc-60444, CRHSP-24 shRNA Plasmid (h): sc-60443-SH, CRHSP-24 shRNA Plasmid (m): sc-60444-SH, CRHSP-24 shRNA (h) Lentiviral Particles: sc-60443-V and CRHSP-24 shRNA (m) Lentiviral Particles: sc-60444-V.

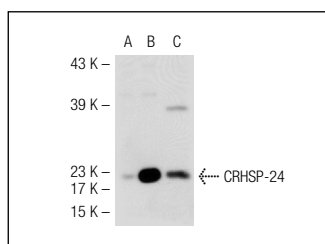
Molecular Weight of CRHSP-24: 24 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, CRHSP-24 (m): 293T Lysate: sc-119456 or CRHSP-24 (h3): 293T Lysate: sc-111688.

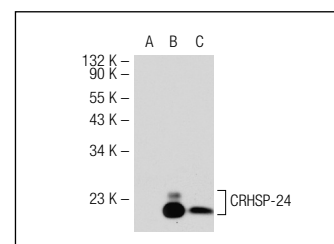
RECOMMENDED SECONDARY REAGENTS

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



CRHSP-24 (N-20): sc-49641. Western blot analysis of CRHSP-24 expression in non-transfected 293T: sc-117752 (A), mouse CRHSP-24 transfected 293T: sc-119456 (B) and Hep G2 (C) whole cell lysates



CRHSP-24 (N-20): sc-49641. Western blot analysis of CRHSP-24 expression in non-transfected 293T: sc-117752 (A), human CRHSP-24 transfected 293T: sc-111688 (B) and Hep G2 (C) whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **CRHSP-24 (D-6): sc-393348** or **CRHSP-24 (A-1): sc-137072**, our highly recommended monoclonal alternatives to CRHSP-24 (N-20).