

# CRHSP-24 (H-40): sc-134831

## BACKGROUND

CRHSP-24 (calcium-regulated heat-stable protein 24) is a serine phosphoprotein originally identified as a physiological substrate for the Ca<sup>2+</sup>-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 Akt-1 (PKB $\alpha$ ) in response to IGF-1, on Ser 52 by Akt-1 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

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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.
7. Sans, M.D., et al. 2004. Calcineurin is required for translational control of protein synthesis in rat pancreatic acini. *Am. J. Physiol., Cell Physiol.* 287: C310-C319.
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## CHROMOSOMAL LOCATION

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

## SOURCE

CRHSP-24 (H-40) is a rabbit polyclonal antibody raised against amino acids 1-40 mapping at the N-terminus of CRHSP-24 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.

## APPLICATIONS

CRHSP-24 (H-40) is recommended for detection of CRHSP-24 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

CRHSP-24 (H-40) is also recommended for detection of CRHSP-24 in additional species, including equine, canine and porcine.

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.

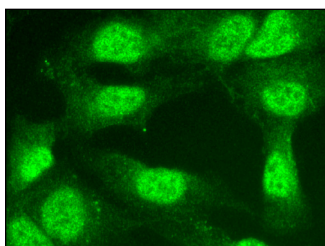
Molecular Weight of CRHSP-24: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



CRHSP-24 (H-40): sc-134831. Immunofluorescence staining of formalin-fixed HepG2 cells showing nuclear and cytoplasmic localization.

## 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.