# CHP (N-13): sc-160241



The Power to Question

#### **BACKGROUND**

CHP (calcineurin homologous protein), also known as calcium-binding protein p22 and calcineurin B homolog, is a 195 amino acid protein that shares significant sequence similarity to calmodulin and PP2B-A $\beta$ , a calmodulin-regulated protein phosphatase. Required for constitutive membrane traffic, CHP functions as a monomer and is expressed in fetal eye, muscle, kidney, liver, lung, speen and thymus. Decreased phosphorylation of CHP is associated with an increase in exchange activity. Overexpression of CHP inhibits GTPase-stimulated NHE-1 activity, impairs nuclear translocation and transcriptional activity of NFAT and inhibits phosphatase acivity of calcineurin in a dose-dependent manner.

#### **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: CHP (human) mapping to 15q14; 1500003003Rik (mouse) mapping to 2 E5.

## **STORAGE**

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

## **SOURCE**

CHP (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CHP 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-160241 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

CHP (N-13) is recommended for detection of CHP 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); non cross-reactive with CHP2.

Suitable for use as control antibody for CHP siRNA (h): sc-90201, CHP siRNA (m): sc-142330, CHP siRNA (r): sc-156114, CHP shRNA Plasmid (h): sc-90201-SH, CHP shRNA Plasmid (m): sc-142330-SH, CHP shRNA Plasmid (r): sc-156114-SH, CHP shRNA (h) Lentiviral Particles: sc-90201-V, CHP shRNA (m) Lentiviral Particles: sc-142330-V and CHP shRNA (r) Lentiviral Particles: sc-156114-V.

Molecular Weight of CHP: 22 kDa.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat lgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat lgG-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 lgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat lgG-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.

## **PROTOCOLS**

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

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