# CAPS2 (M-15): sc-167385



The Power to Question

# **BACKGROUND**

CAPS2 (calcyphosine 2), also known as calcyphosin-2, is a 557 amino acid calcium-binding protein that is abundantly expressed, with highest expression found in placenta, testis, colon, lung and brain. CAPS2 contains three EF-hand domains and exists as three alternatively spliced isoforms. Suggested to play a role in large dense-core vesicle (LDCV) exocytosis, CAPS2 is encoded by a gene that maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

# **REFERENCES**

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- Lo, F.S., et al. 2009. High resolution melting analysis for mutation detection for PTPN11 gene: applications of this method for diagnosis of Noonan syndrome. Clin. Chim. Acta 409: 75-77.
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# CHROMOSOMAL LOCATION

Genetic locus: Caps2 (mouse) mapping to 10 D2.

# SOURCE

CAPS2 (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CAPS2 of mouse origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167385 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

CAPS2 (M-15) is recommended for detection of CAPS2 of mouse and rat 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 CAPS1 or CAPSL.

CAPS2 (M-15) is also recommended for detection of CAPS2 in additional species, including equine.

Suitable for use as control antibody for CAPS2 siRNA (m): sc-142005, CAPS2 shRNA Plasmid (m): sc-142005-SH and CAPS2 shRNA (m) Lentiviral Particles: sc-142005-V.

Molecular Weight of CAPS2: 68 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) with UltraCruz™ Mounting Medium: sc-24941.

# **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.

### **PROTOCOLS**

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

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