## SANTA CRUZ BIOTECHNOLOGY, INC.

# Proenkephalin B (C-12): sc-46460



#### BACKGROUND

The Proenkephalin precursor proteins are secreted proteins belonging to the opioid neuropeptide precursor family. The Proenkephalin proteins are proteolytically processed to form active secreted opioid peptides, which function as ligands for the  $\kappa$ -type of opioid receptor. The Proenkephalin A precursor contains synenkephalin, Leu-enkephalin and Met-enkephalin processed active peptides, while the Proenkephalin B precursor contains  $\beta$ -neoendorphin, dynorphin, leumorphin, Leu-enkephalin and rimorphin processed active peptides.  $\beta$ -endorphin and Met-enkephalin are endogenous opiates, while ACTH is crucial for adrenal gland stimulation to release cortisol. MSH increases melanin production in melanocytes, which leads to an increase in skin pigmentation. Leumorphin may be important in apoptosis prevention by being involved in the MAP kinase and PI 3-kinase pathways.

### CHROMOSOMAL LOCATION

Genetic locus: PDYN (human) mapping to 20p13; Pdyn (mouse) mapping to 2 F1.

#### SOURCE

Proenkephalin B (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Proenkephalin B of human 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-46460 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Proenkephalin B (C-12) is recommended for detection of Proenkephalin B and the processed active peptides Leu-ekephalin, Dynorphin, Leumorphin and Rimorphin 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).

Proenkephalin B (C-12) is also recommended for detection of Proenkephalin B and the processed active peptides Leu-ekephalin, Dynorphin, Leumorphin and Rimorphin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Proenkephalin B siRNA (h): sc-72061, Proenkephalin B siRNA (m): sc-72062, Proenkephalin B shRNA Plasmid (h): sc-72061-SH, Proenkephalin B shRNA Plasmid (m): sc-72062-SH, Proenkephalin B shRNA (h) Lentiviral Particles: sc-72061-V and Proenkephalin B shRNA (m) Lentiviral Particles: sc-72062-V.

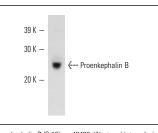
Molecular Weight of Proenkephalin B: 28 kDa.

Positive Controls: rat pituitary tissue extract.

#### **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



Proenkephalin B (C-12): sc-46460. Western blot analysis of Proenkephalin B expression in rat pituitary tissue

extract.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

# MONOS Satisfation Guaranteed

Try Proenkephalin B (D-6): sc-398808 or

Proenkephalin B (A-7): sc-365227, our highly recommended monoclonal alternatives to Proenkephalin B (C-12).