**BACKGROUND**

The CART gene encodes for a protein which has an important role in the regulation of appetite and body weight. The CART (cocaine- and amphetamine-regulated transcript) neuropeptide is an mRNA that changes in response to psychostimulant drug administration. Injection of CART peptides into the ventral tegmental area produces psychostimulant-like effects. CART localizes to areas of the central and peripheral nervous systems and is involved in feeding behavior when injected centrally. Expression of CART in the rat hypothalamus is modulated by nutritional status, and injection of synthetic CART peptide into the forebrain ventricular system suppresses food intake, indicating a possible role in hypothalamic control of energy homeostasis. Its identification in cell bodies and central terminals of vagal afferent neurons additionally suggests a role in brainstem mechanisms of meal termination and satiety.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CARTPT (human) mapping to 5q13.2; Cartpt (mouse) mapping to 13 D1.

**SOURCE**

CART (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CART of human origin.

**PRODUCT**

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

Blocking peptide available for competition studies, sc-18068 P, (100 µg 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**

CART (N-20) is recommended for detection of CART of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg 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).


Molecular Weight of CART: 13 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) 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.

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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

**MONOS**

Try CART (3E4): sc-293241, our highly recommended monoclonal alternative to CART (N-20).