SANTA CRUZ BIOTECHNOLOGY, INC.

CCK58 (N-19): sc-21614

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The regulated translation of messenger RNA is essential for cell-cycle progression, establishment of the body plan during early development and modulation of key activities in the central nervous system. Cytoplasmic polyadenylation, one mechanism of controlling translation, is driven by cytoplasmic polyadenylation element binding protein, CPEB. CPEB is a highly conserved, sequence-specific RNA-binding protein that binds to the cytoplasmic polyadenylation element, thereby modulating translational repression and mRNA localization. Blocking cytoplasmic polyadenylation by interfering with the CPE or CPEB prevents the translational activation and translational repression of mRNAs crucial for oocyte maturation. CPEB is synthesized during oogenesis and stockpiled in the oocyte. CPEB degradation occurs via the proteasome pathway, most likely through ubiquitin-conjugated intermediates.

REFERENCES

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2. Takahashi, Y., et al. 1986. Structure of human cholecystokinin gene and its chromosomal location. Gene 50: 353-360.
3. Ahren, B., et al. 2000. Antidiabetogenic action of cholecystokinin-8 in type 2 diabetes. J. Clin. Endocrinol. Metab. 85: 1043-1048.
4. Rehfeld, J.F., et al. 2001. The predominant cholecystokinin in human plasma and intestine is cholecystokinin-33. J. Clin. Endocrinol. Metab. 86: 251-258.
5. Panksepp, J., et al. 2004. Regional brain cholecystokinin changes as a function of friendly and aggressive social interactions in rats. Brain Res. 1025: 75-84.
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7. Giacobini, P., et al. 2004. Cholecystokinin modulates migration of gonadotropin-releasing hormone-1 neurons. J. Neurosci. 24: 4737-4748.
8. Fan, W., et al. 2004. Cholecystokinin-mediated suppression of feeding involves the brainstem melanocortin system. Nat. Neurosci. 7: 335-336.

CHROMOSOMAL LOCATION

Genetic locus: CCK (human) mapping to 3p22.1.

SOURCE

CCK58 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CCK58 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-21614 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

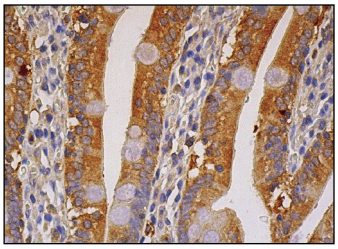
CCK58 (N-19) is recommended for detection of CCK58 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CCK siRNA (h): sc-39496, CCK shRNA Plasmid (h): sc-39496-SH and CCK shRNA (h) Lentiviral Particles: sc-39496-V.

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) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CCK58 (N-19): sc-21614. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

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.