SANTA CRUZ BIOTECHNOLOGY, INC.

CCP6 (G-13): sc-138892

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The peptidase M14 family of carboxypeptidases (CPs) are involved in various functions throughout the body which include digestion of food and biosynthesis of peptides that function in intercellular signaling. CCP6 (cytosolic carboxypeptidase 6), also known as AGBL4 (ATP/GTP binding protein-like 4), is a 540 amino acid cytoplasmic protein that is expressed in testis, pituitary and brain, with more moderate expression observed in eye, stomach, kidney and adrenal tissue. It is suggested that CCP6 may be involved in processing of cytosolic proteins such as α Tubulin. The gene encoding CCP6 maps to human chromosome 1, the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1 which include Hutchinson-Gilford progeria, familial adenomatous polyposis, Parkinsons, Gaucher disease and Usher syndrome.

REFERENCES

1. Harris, A., et al. 2000. Regenerating motor neurons express Nna1, a novel ATP/GTP-binding protein related to zinc carboxypeptidases. Mol. Cell. Neurosci. 16: 578-596.
2. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
3. Gregory, S.G., et al. 2006. The DNA sequence and biological annotation of human chromosome 1. Nature 441: 315-321.
4. Kalinina, E., et al. 2007. A novel subfamily of mouse cytosolic carboxypeptidases. FASEB J. 21: 836-850.
5. Rodriguez de la Vega, M., et al. 2007. Nna1-like proteins are active metallocarboxypeptidases of a new and diverse M14 subfamily. FASEB J. 21: 851-865.

CHROMOSOMAL LOCATION

Genetic locus: AGBL4 (human) mapping to 1p33; Agbl4 (mouse) mapping to 4 C7.

SOURCE

CCP6 (G-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CCP6 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138892 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

CCP6 (G-13) is recommended for detection of CCP6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CCP family members.

CCP6 (G-13) is also recommended for detection of CCP6 in additional species, including bovine.

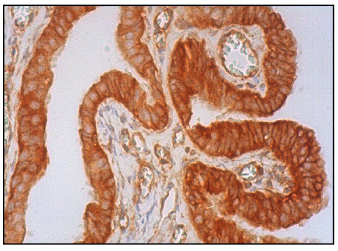
Suitable for use as control antibody for CCP6 siRNA (h): sc-88061, CCP6 siRNA (m): sc-142171, CCP6 shRNA Plasmid (h): sc-88061-SH, CCP6 shRNA Plasmid (m): sc-142171-SH, CCP6 shRNA (h) Lentiviral Particles: sc-88061-V and CCP6 shRNA (m) Lentiviral Particles: sc-142171-V.

Molecular Weight of CCP6: 45 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



CCP6 (G-13): sc-138892. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic and membrane staining of glandular cells.

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.