SANTA CRUZ BIOTECHNOLOGY, INC.

CCP2 (K-13): sc-138192

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. CCP2 (cytosolic carboxypeptidase 2), also known as AGBL2 (ATP/GTP binding protein-like 2), is a 902 amino acid cytoplasmic protein belonging to the peptidase M14 family. CCP2 is considered a metallocarboxypeptidase that may play a role in the processing of tubulin. CCP2 binds one zinc ion per subunit as a cofactor and exists as three alternatively spliced isoforms. The gene encoding CCP2 is located on human chromosome 11p11.2. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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3. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. J. Invest. Dermatol. 126: 2408-2413.
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.
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CHROMOSOMAL LOCATION

Genetic locus: AGBL2 (human) mapping to 11p11.2; Agbl2 (mouse) mapping to 2 E1.

SOURCE

CCP2 (K-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CCP2 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-138192 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CCP2 (K-13) is recommended for detection of CCP2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CCP family members.

CCP2 (K-13) is also recommended for detection of CCP2 in additional species, including canine and bovine.

Suitable for use as control antibody for CCP2 siRNA (h): sc-96960, CCP2 siRNA (m): sc-142167, CCP2 shRNA Plasmid (h): sc-96960-SH, CCP2 shRNA Plasmid (m): sc-142167-SH, CCP2 shRNA (h) Lentiviral Particles: sc-96960-V and CCP2 shRNA (m) Lentiviral Particles: sc-142167-V.

Molecular Weight of CCP2 isoforms: 104/50/32 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.

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.