

# CCP3 (E-16): sc-246221

## BACKGROUND

CCP3 (cytosolic carboxypeptidase 3), also known as AGBL3 (ATP/GTP-binding protein-like 3), is a 1,001 amino acid cytosolic protein that exists as 4 alternatively spliced isoforms and belongs to the peptidase M14 family. As a metalloprotease, CCP3 binds one zinc ion per subunit and may play a role in the processing of tubulin. The gene that encodes CCP3 consists of approximately 161,457 bases and maps to human chromosome 7q33. Housing over 1,000 genes, chromosome 7 comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

## REFERENCES

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3. Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. *Arch. Otolaryngol. Head Neck Surg.* 127: 705-708.
4. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. *Methods Mol. Med.* 126: 113-128.
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6. Gilbert-Dussardier, B. 2006. Williams-Beuren syndrome. *Rev. Prat.* 56: 2102-2106.
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## CHROMOSOMAL LOCATION

Genetic locus: AGBL3 (human) mapping to 7q33; Agbl3 (mouse) mapping to 6 B1.

## SOURCE

CCP3 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CCP3 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-246221 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CCP3 (E-16) is recommended for detection of CCP3 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CCP family members.

CCP3 (E-16) is also recommended for detection of CCP3 in additional species, including bovine and porcine.

Suitable for use as control antibody for CCP3 siRNA (h): sc-89741, CCP3 siRNA (m): sc-142168, CCP3 shRNA Plasmid (h): sc-89741-SH, CCP3 shRNA Plasmid (m): sc-142168-SH, CCP3 shRNA (h) Lentiviral Particles: sc-89741-V and CCP3 shRNA (m) Lentiviral Particles: sc-142168-V.

Molecular Weight of CCP3 isoforms: 116/73/20/107 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.