

CLPTM1 (D-20): sc-49173

BACKGROUND

Clefts of the oral-facial region usually occur in early fetal development and can affect the lip, the soft palate (the soft tissue in the back of the mouth) and the hard palate (the roof of the mouth). Cleft lip (with or without cleft palate) is a genetically complex birth defect that occurs in approximately one in every 750 to 1,000 live births. This is one of the most common birth defects and is multifactorial, with both genetic and environmental causes. Cleft lip- and palate-associated transmembrane protein 1 (CLPTM1) belongs to a family of cleft lip and palate transmembrane proteins. This family also contains cisplatin resistance-related protein (CRR9), which is involved in CDDP-induced apoptosis. The CLPTM1 gene is located on chromosome 19q13.32. The CLPTM1 protein shows strong homology to two *Caenorhabditis elegans* genes.

REFERENCES

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5. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604783. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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7. Turhani, D., et al. 2005. Mutation analysis of CLPTM1 and PVRL1 genes in patients with non-syndromic clefts of lip, alveolus and palate. *J. Craniomaxillofac. Surg.* 33: 301-306.

CHROMOSOMAL LOCATION

Genetic locus: CLPTM1 (human) mapping to 19q13.32; Clptm1 (mouse) mapping to 7 A3.

SOURCE

CLPTM1 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CLPTM1 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-49173 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLPTM1 (D-20) is recommended for detection of CLPTM1 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).

CLPTM1 (D-20) is also recommended for detection of CLPTM1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CLPTM1 siRNA (h): sc-60415, CLPTM1 siRNA (m): sc-60416, CLPTM1 shRNA Plasmid (h): sc-60415-SH, CLPTM1 shRNA Plasmid (m): sc-60416-SH, CLPTM1 shRNA (h) Lentiviral Particles: sc-60415-V and CLPTM1 shRNA (m) Lentiviral Particles: sc-60416-V.

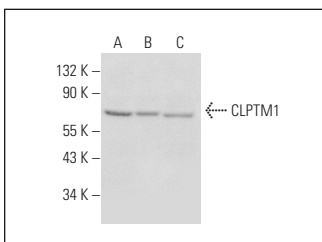
Molecular Weight of CLPTM1: 76 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, K-562 whole cell lysate: sc-2203 or MOLT-4 cell lysate: sc-2233.

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.

DATA



CLPTM1 (D-20): sc-49173. Western blot analysis of CLPTM1 expression in Jurkat (A), K-562 (B) and MOLT-4 (C) whole cell lysates.

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.