

CLPTM1 (H-181): sc-292280

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 750-1,000 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 protein shows strong homology to two *Caenorhabditis elegans* genes.

REFERENCES

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- Warrington, A., et al. 2006. Genetic evidence for the role of loci at 19q13 in cleft lip and palate. *J. Med. Genet.* 43: 26.

CHROMOSOMAL LOCATION

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

SOURCE

CLPTM1 (H-181) is a rabbit polyclonal antibody raised against amino acids 21-201 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.

APPLICATIONS

CLPTM1 (H-181) 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 (H-181) is also recommended for detection of CLPTM1 in additional species, including canine and bovine.

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.

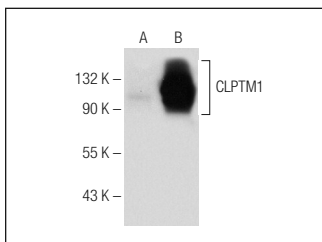
Molecular Weight of CLPTM1: 76 kDa.

Positive Controls: human CLPTM1 transfected HEK293T whole cell lysate.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CLPTM1 (H-181): sc-292280. Western blot analysis of CLPTM1 expression in non-transfected (A) and human CLPTM1 transfected (B) HEK293T 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.