

CLPTM1 (G-7): sc-374619

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.

CHROMOSOMAL LOCATION

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

SOURCE

CLPTM1 (G-7) is a mouse monoclonal antibody raised against amino acids 21-201 mapping near the N-terminus of CLPTM1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CLPTM1 (G-7) is available conjugated to agarose (sc-374619 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374619 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374619 PE), fluorescein (sc-374619 FITC), Alexa Fluor® 488 (sc-374619 AF488), Alexa Fluor® 546 (sc-374619 AF546), Alexa Fluor® 594 (sc-374619 AF594) or Alexa Fluor® 647 (sc-374619 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374619 AF680) or Alexa Fluor® 790 (sc-374619 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

CLPTM1 (G-7) is recommended for detection of CLPTM1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

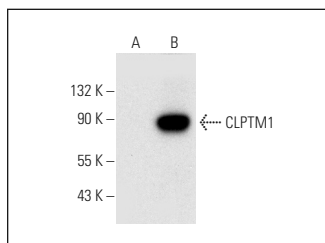
Molecular Weight of CLPTM1: 76 kDa.

Positive Controls: CLPTM1 (h): 293T Lysate: sc-171512.

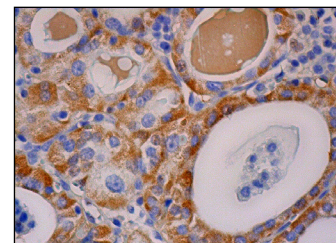
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CLPTM1 (G-7): sc-374619. Western blot analysis of CLPTM1 expression in non-transfected: sc-117752 (A) and human CLPTM1 transfected: sc-171512 (B) 293T whole cell lysates.



CLPTM1 (G-7): sc-374619. Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid gland tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Clark, D.J., et al. 2016. Glycoproteomic approach identifies KRAS as a positive regulator of CREG1 in non-small cell lung cancer cells. *Theranostics* 6: 65-77.
- Li, F., et al. 2021. H9N2 virus-derived M1 protein promotes H5N6 virus release in mammalian cells: mechanism of avian influenza virus interspecies infection in humans. *PLoS Pathog.* 17: e1010098.
- Zhang, X.L., et al. 2022. Clptm1, a new target in suppressing epileptic seizure by regulating GABAA R-mediated inhibitory synaptic transmission in a PTZ-induced epilepsy model. *Kaohsiung J. Med. Sci.* E-published.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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