

CD39L4 (h2): 293T Lysate: sc-372876

BACKGROUND

CD39, also known as ectonucleoside triphosphate diphosphohydrolase 1 (ENP1), is an integral membrane glycoprotein that acts as an extracellular nucleotide-hydrolyzing enzyme. Characteristically, CD39 and other members of the ecto-ATPase family contain apyrase-conserved regions and function to mediate nucleotide catabolism. CD39L4, also known as ENTPD5 (ectonucleoside triphosphate diphosphohydrolase 5), is a 428 amino acid protein that is similar to CD39 and localizes to the lumen of the endoplasmic reticulum (ER). Highly expressed in colon, testis, kidney, liver and prostate, CD39L4 is thought to promote reglycosylation reactions that are involved in the folding of glycoproteins and in quality control events in the ER. Like other members of the ecto-ATPase family, CD39L4 contains four apyrase-conserved regions and is catalytically activated by calcium and magnesium. Overexpression of CD39L4 is implicated in the development of breast, testicular and prostate cancer, suggesting that CD39L4 may be a proto-oncogene involved in carcinogenesis.

REFERENCES

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- Blanquez, M.J., et al. 2002. Gradual deregulation and loss of PCPH expression in the progression of human laryngeal neoplasia. *Mol. Carcinog.* 35: 186-195.
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- Murphy-Piedmonte, D.M., et al. 2005. Bacterial expression, folding, purification and characterization of soluble NTPDase5 (CD39L4) ecto-nucleotidase. *Biochim. Biophys. Acta* 1747: 251-259.
- Regadera, J., et al. 2006. PCPH expression is an early event in the development of testicular germ cell tumors. *Int. J. Oncol.* 28: 595-604.
- Villar, J., et al. 2007. PCPH/ENTPD5 expression enhances the invasiveness of human prostate cancer cells by a protein kinase C δ -dependent mechanism. *Cancer Res.* 67: 10859-10868.
- Rücker, B., et al. 2008. E-NTPDases and ecto-5'-nucleotidase expression profile in rat heart left ventricle and the extracellular nucleotide hydrolysis by their nerve terminal endings. *Life Sci.* 82: 477-486.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: ENTPD5 (human) mapping to 14q24.3.

PRODUCT

CD39L4 (h2): 293T Lysate represents a lysate of human CD39L4 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

CD39L4 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive CD39L4 antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

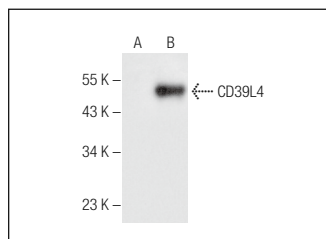
CD39L4 (F-4): sc-377256 is recommended as a positive control antibody for Western Blot analysis of enhanced human CD39L4 expression in CD39L4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

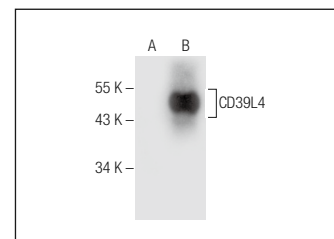
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



CD39L4 (F-4): sc-377256. Western blot analysis of CD39L4 expression in non-transfected: sc-117752 (A) and human CD39L4 transfected: sc-372876 (B) 293T whole cell lysates.



CD39L4 (C-6): sc-377172. Western blot analysis of CD39L4 expression in non-transfected: sc-117752 (A) and human CD39L4 transfected: sc-372876 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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