SANTA CRUZ BIOTECHNOLOGY, INC.

CD39L2 (V-14): sc-85469

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The Power to Question

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. CD39L2, also known as ENTPD6 (ectonucleoside triphosphate diphosphohydrolase 6), IL6ST2 or IL-6SAG, is a 484 amino acid protein that is similar to CD39 and localizes to the membrane of the Golgi apparatus. Expressed ubiquitously with highest expression in heart tissue, CD39L2 is thought to promote glycosylation reactions in the Golgi and may catalyze the hydrolysis of extracellular nucleotides. Like other members of the ecto-ATPase family, CD39L2 contains four apyrase-conserved regions and is catalytically activated by calcium and magnesium. Multiple isoforms of CD39L2 exist due to alternative splicing events.

REFERENCES

1. Chadwick, B.P. and Frischauf, A.M. 1998. The CD39-like gene family: identification of three new human members (CD39L2, CD39L3, and CD39L4), their murine homologues, and a member of the gene family from *Drosophila melanogaster*. Genomics 50: 357-367.
2. Chadwick, B.P., Williamson, J., Sheer, D. and Frischauf, A.M. 1998. cDNA cloning and chromosomal mapping of a mouse gene with homology to NTPases. Mamm. Genome 9: 162-164.
3. Hicks-Berger, C.A., Chadwick, B.P., Frischauf, A.M. and Kirley, T.L. 2000. Expression and characterization of soluble and membrane-bound human nucleoside triphosphate diphosphohydrolase 6 (CD39L2). J. Biol. Chem. 275: 34041-34045.
4. Yeung, G., Mulero, J.J., McGowan, D.W., Bajwa, S.S. and Ford, J.E. 2000. CD39L2, a gene encoding a human nucleoside diphosphatase, predominantly expressed in the heart. Biochemistry 39: 12916-12923.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603160. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Ivanenkov, V.V., Murphy-Piedmonte, D.M. and Kirley, T.L. 2003. Bacterial expression, characterization, and disulfide bond determination of soluble human NTPDase6 (CD39L2) nucleotidase: implications for structure and function. Biochemistry 42: 11726-11735.
7. Rücker, B., Almeida, M.E., Libermann, T.A., Zerbini, L.F., Wink, M.R. and Sarkis, J.J. 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.

CHROMOSOMAL LOCATION

Genetic locus: ENTPD6 (human) mapping to 20p11.21; Entpd6 (mouse) mapping to 2 G3.

SOURCE

CD39L2 (V-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of CD39L2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85469 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD39L2 (V-14) is recommended for detection of CD39L2 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).

Suitable for use as control antibody for CD39L2 siRNA (h): sc-72828, CD39L2 siRNA (m): sc-142198, CD39L2 shRNA Plasmid (h): sc-72828-SH, CD39L2 shRNA Plasmid (m): sc-142198-SH, CD39L2 shRNA (h) Lentiviral Particles: sc-72828-V and CD39L2 shRNA (m) Lentiviral Particles: sc-142198-V.

Molecular Weight of CD39L2: 58 kDa.

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) 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.

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 or our catalog for detailed protocols and support products.