SANTA CRUZ BIOTECHNOLOGY, INC.

P2Y10 (K-19): sc-168872



The Power to Question

BACKGROUND

Nucleotides are important extracellular signaling molecules that mediate several events, such as cell proliferation, differentiation, chemotaxis and cytokine release. The P2 receptor family is activated by the binding of nucleotides and is divided into two subfamilies, designated P2X and P2Y. The P2Y receptor family are G protein-coupled receptors that mediate the effects of extracellular nucleotides, primarily through the activation of phospholipase C (PLC). To some extent, the P2Y receptors can also activate potassium channels or, alternatively, inhibit adenylate cyclase and N-type calcium channels in response to extracellular nucleotides. P2Y10 (purinergic receptor P2Y, G-protein coupled, 10), also known as P2RY10, is a 339 amino acid multi-pass membrane protein that is thought to act as a receptor for purines coupled to G-proteins. P2Y10 is found at low levels in blood leukocytes and is upregulated during promyelocytic cell differentiation.

REFERENCES

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- 3. Adrian, K., et al. 2000. Expression of purinergic receptors (ionotropic P2X1-7 and metabotropic P2Y1-11) during myeloid differentiation of HL60 cells. Biochim. Biophys. Acta 1492: 127-138.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 300529. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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- Murakami, M., et al. 2008. Identification of the orphan GPCR, P2Y(10) receptor as the sphingosine-1-phosphate and lysophosphatidic acid receptor. Biochem. Biophys. Res. Commun. 371: 707-712.
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CHROMOSOMAL LOCATION

Genetic locus: P2RY10 (human) mapping to Xq21.1.

SOURCE

P2Y10 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of P2Y10 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168872 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

P2Y10 (K-19) is recommended for detection of P2Y10 of 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); non cross-reactive with other P2Y family members.

P2Y10 (K-19) is also recommended for detection of P2Y10 in additional species, including canine.

Suitable for use as control antibody for P2Y10 siRNA (h): sc-90909, P2Y10 shRNA Plasmid (h): sc-90909-SH and P2Y10 shRNA (h) Lentiviral Particles: sc-90909-V.

Molecular Weight of P2Y10: 39 kDa.

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) Immunofluo-rescence: 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.

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.