

# P2Y13 (6G12E10): sc-517219

## 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 which 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. P2Y13 (purinergic receptor P2Y, G protein-coupled, 13), also known as GPCR1, GPR86 or GPR94, is a 354 amino acid multi-pass membrane protein that belongs to the P2Y receptor family and exists as 2 alternatively spliced isoforms. Expressed at high levels in spleen and adult brain tissue, P2Y13 functions as a receptor for ADP and is thought to play a role in immune system activity, as well as in hematopoiesis.

## REFERENCES

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- Wang, L., et al. 2005. ADP acting on P2Y13 receptors is a negative feedback pathway for ATP release from human red blood cells. *Circ. Res.* 96: 189-196.
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## CHROMOSOMAL LOCATION

Genetic locus: P2RY13 (human) mapping to 3q25.1; P2ry13 (mouse) mapping to 3 D.

## SOURCE

P2Y13 (6G12E10) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-49 of P2Y13 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

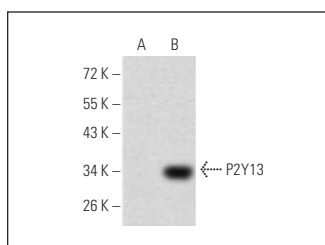
P2Y13 (6G12E10) is recommended for detection of P2Y13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], flow cytometry (1 µg per 1 x 10<sup>6</sup> cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for P2Y13 siRNA (h): sc-76028, P2Y13 siRNA (m): sc-76029, P2Y13 shRNA Plasmid (h): sc-76028-SH, P2Y13 shRNA Plasmid (m): sc-76029-SH, P2Y13 shRNA (h) Lentiviral Particles: sc-76028-V and P2Y13 shRNA (m) Lentiviral Particles: sc-76029-V.

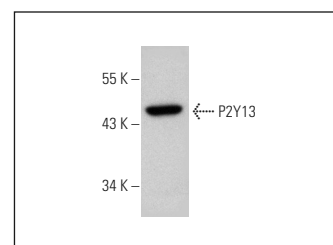
Molecular Weight of P2Y13: 41 kDa.

Positive Controls: human P2Y13 (1-49)-hlgGfC transfected HEK293 whole cell lysate or C6 whole cell lysate: sc-364373.

## DATA



P2Y13 (6G12E10): sc-517219. Western blot analysis of P2Y13 expression in non-transfected (A) and human P2Y13 (1-49)-hlgGfC transfected (B) HEK293 whole cell lysates.



P2Y13 (6G12E10): sc-517219. Western blot analysis of P2Y13 expression in C6 whole cell lysate.

## 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](http://www.scbt.com) for detailed protocols and support products.