

P2X5 (H-90): sc-25695

BACKGROUND

The P2X receptor family is comprised of ligand-gated ion channels that allow for the increased permeability of calcium into the cell in response to extracellular ATP. The seven P2X receptors, P2X1-P2X7, form either homomeric or heteromeric channels or both. They are characterized by intracellular amino- and carboxy-termini. P2X receptors are expressed in a wide variety of tissues, including neurons, prostate, bladder, pancreas, colon, testis and ovary. The major function of the P2X receptors is to mediate synaptic transmissions between neurons and to other tissues via the binding of extracellular ATP, which acts as a neurotransmitter. The P2X receptors may be involved in the onset of necrosis or apoptosis after prolonged exposure to high concentrations of extracellular ATP.

REFERENCES

1. Longhurst, P.A., et al. 1996. The human P2X1 receptor: molecular cloning, tissue distribution, and localization to chromosome 17. *Biochim. Biophys. Acta* 1308: 185-188.
2. Di Virgilio, F., et al. 1998. Cytolytic P2X purinoceptors. *Cell Death Differ.* 5: 191-199.

CHROMOSOMAL LOCATION

Genetic locus: P2RX5 (human) mapping to 17p13.3

SOURCE

P2X5 (H-90) is a rabbit polyclonal antibody raised against amino acids 332-421 mapping at the C-terminus of P2X5 of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

P2X5 (H-90) is recommended for detection of P2X5 of 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)], 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 P2X5 siRNA (h): sc-42571, P2X5 shRNA Plasmid (h): sc-42571-SH and P2X5 shRNA (h) Lentiviral Particles: sc-42571-V.

Molecular Weight of homomeric P2X5: 70 kDa.

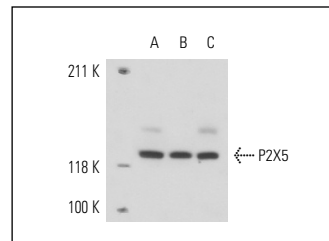
Molecular Weight of dimeric P2X5: 140 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237, Caki-1 cell lysate: sc-2224 or P2X5 (h): 293T Lysate: sc-115512.

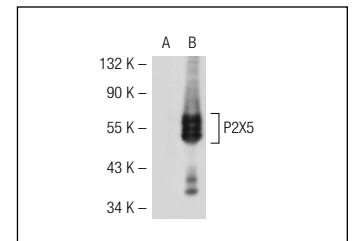
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



P2X5 (H-90): sc-25695. Western blot analysis of P2X5 expression in SK-N-MC (A), Caki-1 (B) and Jurkat (C) whole cell lysates.



P2X5 (H-90): sc-25695. Western blot analysis of P2X5 expression in non-transfected: sc-117752 (A) and human P2X5 transfected: sc-115512 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Goodfellow, S.J., et al. 2011. WT1 and its transcriptional cofactor BASP1 redirect the differentiation pathway of an established blood cell line. *Biochem. J.* 435: 113-125.

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.



Try **P2X5 (H-5): sc-365036** or **P2X5 (C-2): sc-373795**, our highly recommended monoclonal alternatives to P2X5 (H-90).