

P2X2 (Y-25): sc-133875

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

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4. Burnstock, G. 2000. P2X receptors in sensory neurones. *Br. J. Anaesth.* 84: 476-488.
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8. Jabs, R., et al. 2000. Evidence for P2X₃, P2X₄, P2X₅ but not for P2X₇ containing purinergic receptors in Müller cells of the rat retina. *Brain Res. Mol. Brain Res.* 76: 205-210.

CHROMOSOMAL LOCATION

Genetic locus: P2RX2 (human) mapping to 12q24.33.

SOURCE

P2X2 (Y-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic P2X2 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

P2X2 (Y-25) is recommended for detection of P2X2 of human and canine 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for P2X2 siRNA (h): sc-42565, P2X2 shRNA Plasmid (h): sc-42565-SH and P2X2 shRNA (h) Lentiviral Particles: sc-42565-V.

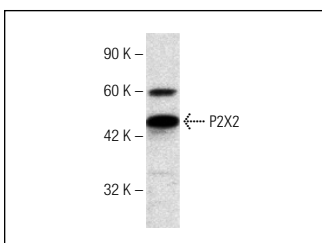
Molecular Weight of P2X2 isoforms: 41-55 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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).

DATA



P2X2 (Y-25): sc-133875. Western blot analysis of P2X2 expression in Hep G2 whole cell lysate.

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.


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Try **P2X2 (3D5): sc-293319**, our highly recommended monoclonal alternative to P2X2 (Y-25).