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**


**CHROMOSOMAL LOCATION**

Genetic locus: P2RX3 (human) mapping to 11q12.1; P2rx3 (mouse) mapping to 2 D.

**SOURCE**

P2X3 (B-5) is a mouse monoclonal antibody raised against amino acids 338-397 mapping at the C-terminus of P2X3 of human origin.

**PRODUCT**

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

P2X3 (B-5) is available conjugated to agarose (sc-390572 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390572 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390572 PE), fluorescein (sc-390572 FITC), Alexa Fluor® 488 (sc-390572 AF488), Alexa Fluor® 546 (sc-390572 AF546), Alexa Fluor® 594 (sc-390572 AF594) or Alexa Fluor® 647 (sc-390572 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390572 AF680) or Alexa Fluor® 790 (sc-390572 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

P2X3 (B-5) is recommended for detection of P2X3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 P2X3 siRNA (h): sc-42567, P2X3 siRNA (m): sc-42568, P2X3 shRNA Plasmid (h): sc-42567-SH, P2X3 shRNA Plasmid (m): sc-42568-SH, P2X3 shRNA (h) Lentiviral Particles: sc-42567-V and P2X3 shRNA (m) Lentiviral Particles: sc-42568-V.

Molecular Weight of P2X3: 44 kDa.

Molecular Weight of glycosylated P2X3: 66 kDa.

Positive Controls: RT-4 whole cell lysate: sc-364257, T24 cell lysate: sc-2292 or Hep G2 cell lysate: sc-2227.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 STORAG E**

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 for detailed protocols and support products.