# P2X3 (S-17): sc-31494



The Power to Question

## **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. There are seven P2X receptors, P2X1, P2X2, P2X3, P2X4, P2X5, P2X6, P2X7, which form either homomeric or heteromeric channels or both, and 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.

# **CHROMOSOMAL LOCATION**

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

#### **SOURCE**

P2X3 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of P2X3 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31494 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **STORAGE**

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

# **APPLICATIONS**

P2X3 (S-17) is recommended for detection of P2X3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

P2X3 (S-17) is also recommended for detection of P2X3 in additional species, including equine, canine and bovine.

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.

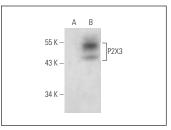
Molecular Weight of glycosylated P2X3: 66 kDa.

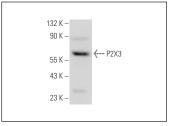
Positive Controls: P2X3 (m): 293T Lysate: sc-127280 or Jurkat whole cell lysate: sc-2204.

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

## **DATA**





P2X3 (S-17): sc-31494. Western blot analysis of P2X3 expression in non-transfected: sc-117752 (**A**) and mouse P2X3 transfected: sc-127280 (**B**) 293T whole scall heater.

P2X3 (S-17): sc-31494. Western blot analysis of P2X3 expression in Jurkat 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.



Try **P2X3 (B-5): sc-390572**, our highly recommended monoclonal aternative to P2X3 (S-17).

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