Product Information Sheet

Polyclonal Anti- Purinergic receptor P2X, ligand-gated ion channel 3, *P2X3*

Catalogue No. PA1213

Lot No. 09C01

Ig type rabbit IgG

Size 100µg/vial

Specificity

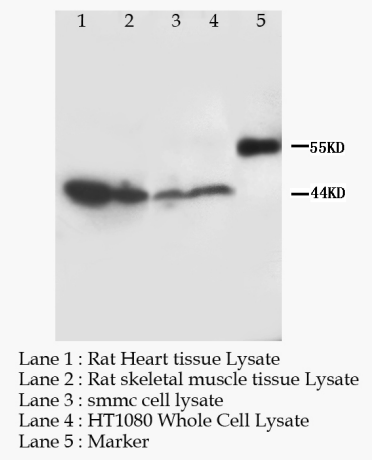
Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)



Lane 1 : Rat Heart tissue Lysate
Lane 2 : Rat skeletal muscle tissue Lysate
Lane 3 : smmc cell lysate
Lane 4 : HT1080 Whole Cell Lysate
Lane 5 : Marker

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human P2X3, different from the related rat sequence by one amino acid.

Purity

Immunogen affinity purified.

Application

	Concen-tration	Tested Species	Concluded Species	Antigen Retrieval
WB	1µg/ml	Hu, Rat	Ms	-
IHC-P	1-2µg/ml	Rat	Ms	By Heat
IHC-F	-	-	-	-
ICC	-	-	-	-

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

To reorder contact us at:

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BACKGROUND

Purinergic receptor P2X, ligand-gated ion channel, 3, also known as P2X3, is a human gene. Its gene is mapped to 11q12. P2X purinoceptors are 397 to 492 amino acids long and have a predicted structure of 2 short intracellular domains, 2 transmembrane-spanning regions, and a large extracellular domain. The P2X3 subunit has 43% and 47% identity with P2X1 and P2X2, respectively; 10 cysteine residues are conserved in all 3 subtypes, so that tertiary structures may also be conserved.[1] P2X3 was the only ligand-gated channel known to be expressed exclusively by a subset of sensory neurons. The remarkable selectivity of expression of the channel, coupled with a sensory neuron-like pharmacology, suggested that it may transduce ATP-evoked nociceptor activation.[2] If ATP, and more specifically, P2X3 purinoceptors are involved in nociception, then the development of an antagonist selective for P2X3 could prove useful in pain relief. Lack of P2X3 in other tissues than sensory ganglia could afford a degree of specificity, leading to fewer side effects.[3]

REFERENCE

1. Kennedy, C.; Leff, P. : Painful connection for ATP. Nature 377: 385-386, 1995.
2. Chen, C.-C.; Akopian, A. N.; Sivilotti, L.; Colquhoun, D.; Burnstock, G.; Wood, J. N. : A P2X purinoceptor expressed by a subset of sensory neurons. Nature 377: 428-430, 1995.
3. Kennedy, C.; Leff, P. : Painful connection for ATP. Nature 377: 385-386, 1995.