



Product Information Sheet

Polyclonal Anti-Protein Phosphatase 2A Catalytic, **PP2A**

Catalogue No. PA1068

Lot No. 05D01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, mouse, rat.

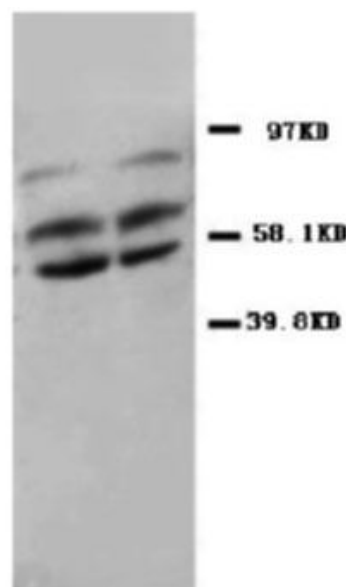
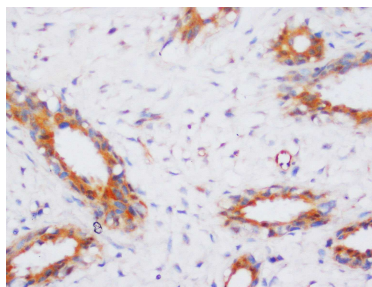
No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunocytochemistry



Immunogen

A synthetic peptide corresponding to a sequence mapping near the N-terminal of human PP2A, identical to the related rat and mouse sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 1-2µg/ml with the appropriate system to detect PP2A in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect PP2A in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Immunocytochemistry

At 0.5-1µg/ml to detect PP2A in acetone fixed cell. Antigen retrieval by Pepsin and Trypsin is required.

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

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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.

BACKGROUND

The catalytic subunit of human protein phosphatase 2A (PPP2CA) encodes a 309-amino acid polypeptide. It is localized to chromosome 5. The gene (approximately 30 kbp) is composed of seven exons and six introns. It is predicted to be important for phosphatase enzymatic activity. Methylation of the C-terminal leucine residue (Leu309) of protein serine/threonine phosphatase 2A catalytic subunit (PP2AC) is known to regulate catalytic activity in vitro. Furthermore, PP2A has a fundamental role in cardiac function, and suggests that disturbances in protein phosphatase expression and activity may cause or exacerbate the course of cardiac diseases.

REFERENCE

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2. Jones TA, Barker HM, da Cruz e Silva EF, Mayer-Jaekel RE, Hemmings BA, Spurr NK, Sheer D, Cohen PT. Localization of the genes encoding the catalytic subunits of protein phosphatase 2A to human chromosome bands 5q23-->q31 and 8p12-->p11.2, respectively. *Cytogenet Cell Genet.* 1993; 63(1):35-41.
3. Khew-Goodall Y, Mayer RE, Maurer F, Stone SR, Hemmings BA. Structure and transcriptional regulation of protein phosphatase 2A catalytic subunit genes. *Biochemistry.* 1991 Jan 8; 30(1):89-97.
4. Arino J, Woon CW, Brautigan DL, Miller TB Jr, Johnson GL. Human liver phosphatase 2A: cDNA and amino acid sequence of two catalytic subunit isotypes. *Proc Natl Acad Sci U S A.* 1988 Jun; 85(12):4252-6.
5. Bryant JC, Westphal RS, Wadzinski BE. Methylated C-terminal leucine residue of PP2A catalytic subunit is important for binding of regulatory Balpha subunit. *Biochem J.* 1999 Apr 15; 339 (Pt 2):241-6.
6. Gergs U, Boknik P, Buchwalow I, Fabritz L, Matus M, Justus I, Hanske G, Schmitz W, Neumann J. Overexpression of the catalytic subunit of protein phosphatase 2A impairs cardiac function. *J Biol Chem.* 2004 Sep 24; 279(39):40827-34.