蛋白磷酸酶γ1抗体

产品货号： mlR5422

英文名称： PP1C gamma

中文名称： 蛋白磷酸酶γ1抗体

别　　名： EC 3.1.3.16; PP 1G; PP-1G; PP1C gamma; PP1G; PP1G_HUMAN; PP1gamma; PPP 1G; PPP1CC; PPP1CC protein; PPP1G; Protein phosphatase 1 catalytic subunit gamma isoform; Protein Phosphatase 1 gamma 1; Protein Phosphatase 1 gamma; Protein phosphatase 1C catalytic subunit; Protein phosphatase 1C subunit; Protein phosphatase 2C gamma isoform; Serine/threonine phosphatase 1 gamma; Serine/threonine protein phosphatase PP1 gamma catalytic subunit; Serine/threonine-protein phosphatase PP1-gamma catalytic subunit.

研究领域： 肿瘤　细胞生物　免疫学　信号转导　细胞周期蛋白　激酶和磷酸酶　脂蛋白

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Dog, Cow, Horse,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 37kDa

细胞定位： 细胞核 细胞浆

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human PP1G:251-323/323

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed：　PubMed

产品介绍 background:

Protein phosphatase 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. The protein is involved in regulation of ionic conductances and long term synaptic plasticity. It may play an important role in dephosphorylating substrates such as the postsynaptic density associated Ca (2+)/calmodulin dependent protein kinase II. PP1 comprises a catalytic subunit, PPP1CA, PPP1CB or PPP1CC (PP1C gamma), which is folded into its native form by inhibitor 2 and glycogen synthetase kinase 3, and then complexed to one or several targeting or regulatory subunits. PPP1R12A and PPP1R12B mediate binding to myosin. PPP1R3A, PPP1R3B, PPP1R3C and PPP1R3D mediate binding to glycogen.

Function:

Protein phosphatase 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Dephosphorylates RPS6KB1. Involved in regulation of ionic conductances and long-term synaptic plasticity. May play an important role in dephosphorylating substrates such as the postsynaptic density-associated Ca(2+)/calmodulin dependent protein kinase II. Component of the PTW/PP1 phosphatase complex, which plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase.

Subunit:

PP1 comprises a catalytic subunit, PPP1CA, PPP1CB or PPP1CC, which is folded into its native form by inhibitor 2 and glycogen synthetase kinase 3, and then complexed to one or several targeting or regulatory subunits. PPP1R12A, PPP1R12B and PPP1R12C mediate binding to myosin. PPP1R3A (in skeletal muscle), PPP1R3B (in liver), PPP1R3C, PPP1R3D and PPP1R3F (in brain) mediate binding to glycogen. Interacts with cyanobacterial toxin microcystin; disulfide-linked. Interacts with PPP1R3B and PPP1R7. Isoform gamma-2 interacts with SPZ1 (By similarity). Component of the MLL5-L complex, at least composed of MLL5, STK38, PPP1CA, PPP1CB, PPP1CC, HCFC1, ACTB and OGT. Interacts with CDCA2. PPP1R15A and PPP1R15B mediate binding to EIF2S1. Part of a complex containing PPP1R15B, PP1 and NCK1/2. Interacts with IKFZ1; the interaction targets PPP1CC to pericentromeric heterochromatin, dephosphorylates IKAROS, stabilizes it and prevents it from degradation. Interacts with PPP1R42; the interaction is direct (By similarity). Interacts with NOM1 and PPP1R8. Component of the PTW/PP1 phosphatase complex, composed of PPP1R10/PNUTS, TOX4, WDR82, and PPP1CA or PPP1CB or PPP1CC. Interacts with PPP1R8. Interacts with isoform 1 and isoform 4 NEK2. Interacts with URI1; the interaction

is phosphorylation-dependent and occurs in a growth factor-dependent manner.

Subcellular Location:

Cytoplasm. Nucleus. Nucleus, nucleolus. Nucleus, nucleoplasm. Nucleus speckle. Chromosome, centromere, kinetochore. Cleavage furrow. Midbody. Mitochondrion. Note=Colocalizes with SPZ1 in the nucleus (By similarity). Colocalizes with URI1 at mitochondrion. Rapidly exchanges between the nucleolar, nucleoplasmic and cytoplasmic compartments. Highly mobile in cells and can be relocalized through interaction with targeting subunits. In the presence of PPP1R8 relocalizes from the nucleolus to nuclear speckles. Shows a dynamic targeting to specific sites throughout the cell cycle. Highly concentrated in nucleoli of interphase cells and localizes at kinetochores early in mitosis. Relocalization to chromosome-containing regions occurs at the transition from early to late anaphase. Also accumulates at the cleavage furrow and midbody by telophase.

Post-translational modifications:

Phosphorylated by NEK2.

Similarity:

Belongs to the PPP phosphatase family. PP-1 subfamily.

SWISS:

P36873

Gene ID:

5501

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic

applications.

产品图片