



Rabbit Anti-phospho-PPM1a (Ser375)/Biotin Conjugated antibody

SL5586R-Bio

Product Name Anti-phospho-PPM1A(Ser375)/Biotin

Chinese Name 生物素标记的磷酸化蛋白磷酸酶 2C 亚型 α 抗体

Alias PPM1A(phospho S375); Mpp alpha; PP2C alpha; PP2C-alpha; PP2CA; PPM 1A; PPM1A; PPM1A_HUMAN; PPPM1A; Protein phosphatase 1A (formerly 2C) magnesium dependent alpha isoform; Protein phosphatase 1A; Protein phosphatase 1A magnesium dependent alpha; Protein phosphatase 2C alpha; Protein phosphatase 2C alpha isoform; Protein phosphatase 2C isoform alpha; Protein phosphatase IA; Protein phosphatase 2C isoform alpha; IA antibody.

Product Type Phosphorylated anti

Research Area immunology Chromatin and nuclear signals Signal transduction Kinases and Phosphatases

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human(predicted:Dog,Cow,Sheep,GuineaPig)

Applications IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:50-200,IF=1:100-500,Flow-Cyt=1ug/test
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Molecular weight 42kDa

Form Lyophilized or Liquid

Concentration 1mg/ml

immunogen KLH conjugated Synthesised phosphopeptide derived from human PPM1A around the phosphorylation site of Ser375

Lsotype IgG

Purification affinity purified by Protein A

Storage Buffer 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

background:

The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. This phosphatase dephosphorylates, and negatively regulates the activities of, MAP kinases and MAP kinase kinases. It has been shown to inhibit the activation of p38 and JNK kinase cascades induced by environmental stresses. This phosphatase can also dephosphorylate cyclin-dependent kinases, and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to G2/M cell cycle arrest and apoptosis. Three alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008].

Function:

Enzyme with a broad specificity. Negatively regulates TGF-beta signaling through dephosphorylating SMAD2 and SMAD3, resulting in their dissociation from SMAD4, nuclear export of the SMADs and termination of the TGF-beta-mediated signaling.

Subunit:

Monomer. Interacts with SMAD2; the interaction dephosphorylates SMAD2 in its C-terminal SXS motif resulting in disruption of the SMAD2/SMAD4 complex, SMAD2 nuclear export and termination of the TGF-beta-mediated signaling. Interacts with SMAD2; the interaction dephosphorylates SMAD2 in its C-terminal SXS motif resulting in disruption of the SMAD2/SMAD4 complex, SMAD2 nuclear export and termination of the TGF-beta-mediated signaling.

**Product
Detail**

Subcellular Location:

Nucleus.

Similarity:

Belongs to the PP2C family.

Database links:

[Entrez Gene: 5494](#) Human

[Entrez Gene: 19042](#) Mouse

[Omim: 606108](#) Human

[SwissProt: P35813](#) Human

[SwissProt: P49443](#) Mouse



[Unigene: 130036](#) Human

[Unigene: 261045](#) Mouse

Important Note:

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