PP1α (Phospho Thr320) Rabbit pAb

CatalogNo: YP0974

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- IHC,IF,ELISA

MW
- 38kD (Calculated)

Isotype
- IgG

Recommended Dilution Ratios

IHC 1:100-1:300
ELISA 1:10000
IF 1:50-200

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human PP1-alpha around the phosphorylation site of Thr320. AA range:281-330
Specificity	Phospho-PP1α (T320) Polyclonal Antibody detects endogenous levels of PP1α protein only when phosphorylated at T320.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):PItPP

Target Information

Gene name PPP1CA

Protein Name Serine/threonine-protein phosphatase PP1-alpha catalytic subunit

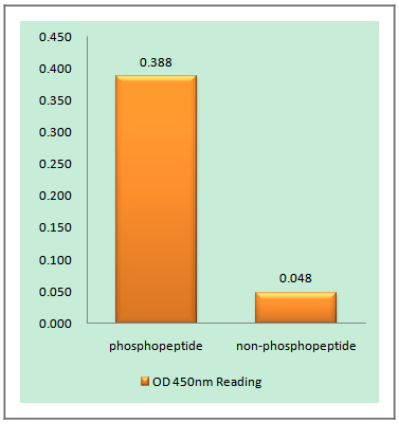
Organism	Gene ID	UniProt ID
Human	5499;	P62136;
Mouse	19045;	P62137;
Rat	24668;	P62138;

Cellular Localization Cytoplasm . Nucleus . Nucleus, nucleoplasm . Nucleus, nucleolus . Primarily nuclear and largely excluded from the nucleolus. Highly mobile in cells and can be relocalized through interaction with targeting subunits. NOM1 plays a role in targeting this protein to the nucleolus. In the presence of PPP1R8 relocalizes from the nucleus to nuclear speckles. Shuttles toward the cytosol during infection with VEEV (PubMed:29769351). .

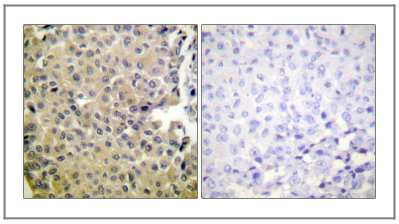
Tissue specificity Colon carcinoma,Liver,Lung,Muscle,Pancreas,Placenta,Platele

Function Catalytic activity:A phosphoprotein + H(2)O = a protein + phosphate.,Caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,cofactor:Binds 1 iron ion per subunit.,cofactor:Binds 1 manganese ion per subunit.,enzyme regulation:The phosphatase activity of the PPP1R15A-PP1 complex toward EIF2S1 is specifically inhibited by Salubrinal, a drug that protects cells from endoplasmic reticulum stress.,Function:Protein phosphatase 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. 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.,online information:The things we forget -Issue 32 of March 2003,similarity:Belongs to the PPP phosphatase family.,similarity:Belongs to the PPP phosphatase family. PP-1 subfamily.,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, PPP1R3B, PPP1R3C and PPP1R3D mediate binding to glycogen. Interacts with PPP1R9A and PPP1R9B. Part of a complex containing PPP1R15B, PP1 and NCK1/2 (By similarity). Interacts with PPP1R7. PPP1R15A and PPP1R15B mediate binding to EIF2S1. Interacts with HHV-1 ICP34.5.,

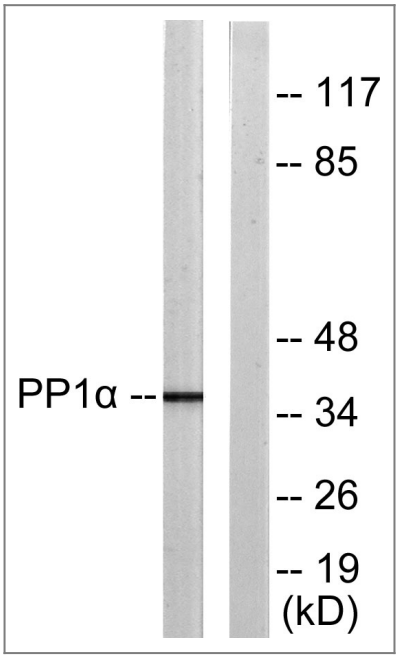
Validation Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PP1-alpha (Phospho-Thr320) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using PP1-alpha (Phospho-Thr320) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of PP1-alpha (Phospho-Thr320) Antibody. The lane on the right is blocked with the PP1-alpha (Phospho-Thr320) peptide.

Contact information

Orders:	order@immunoway.com
Support:	tech@immunoway.com
Telephone:	877-594-3616 (Toll Free), 408-747-0185
Website:	http://www.immunoway.com
Address:	2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information:
PP1α (Phospho Thr320) Rabbit pAb