

PP1 α (phospho Thr320) rabbit pAb**Cat#: orb769564 (Manual)**

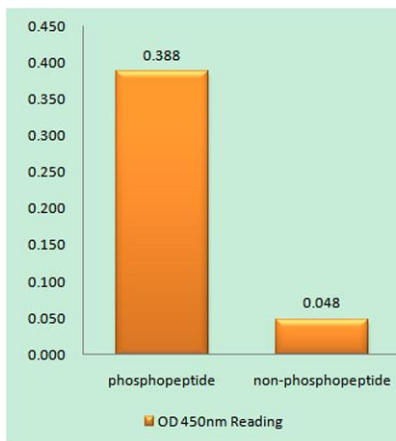
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Product Name	PP1 α (phospho Thr320) rabbit pAb
Host species	Rabbit
Applications	IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human PP1-alpha around the phosphorylation site of Thr320. AA range:281-330
Specificity	Phospho-PP1 α (T320) Polyclonal Antibody detects endogenous levels of PP1 α protein only when phosphorylated at T320.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	Serine/threonine-protein phosphatase PP1-alpha catalytic subunit
Gene Name	PPP1CA
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). .

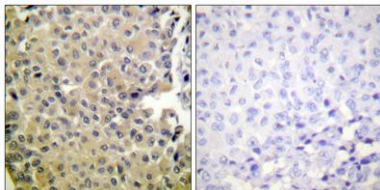
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	
Human Gene ID	5499
Human Swiss-Prot Number	P62136
Alternative Names	PPP1CA; PPP1A; Serine/threonine-protein phosphatase PP1-alpha catalytic subunit; PP-1A

Background

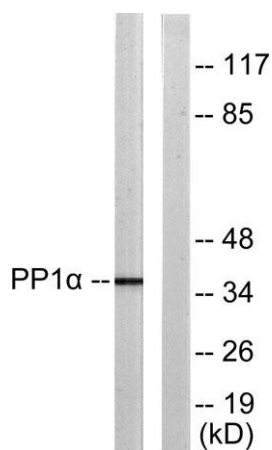
The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Increased PP1 activity has been observed in the end stage of heart failure. Studies in both human and mice suggest that PP1 is an important regulator of cardiac function. Mouse studies also suggest that PP1 functions as a suppressor of learning and memory. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],



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.