

PP1C alpha Mouse mAb

db6650

Package : 50μL 100μL

Product Name : PP1C alpha Mouse mAb**Cat.No.:** db6650**Synonyms** : PP-1A; PPP1A; PP1alpha**Application** : WB, IHC-Fr, IHC-P, ICC/IF**Reactivity** : Human**Host species** : Mouse**Background**

Protein phosphatase that associates with over 200 regulatory proteins to form highly specific holoenzymes which dephosphorylate hundreds of biological targets. 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. 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. Regulates NEK2 function in terms of kinase activity and centrosome number and splitting, both in the presence and absence of radiation-induced DNA damage. Regulator of neural tube and optic fissure closure, and enteric neural crest cell (ENCCs) migration during development. In balance with CSNK1D and CSNK1E, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. May dephosphorylate CSNK1D and CSNK1E. Dephosphorylates the 'Ser-418' residue of FOXP3 in regulatory T-cells (Treg) from patients with rheumatoid arthritis, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed/23396208). Dephosphorylates CENPA (PubMed/25556658). Dephosphorylates the 'Ser-139' residue of ATG16L1 causing dissociation of ATG12-ATG5-ATG16L1 complex, thereby inhibiting autophagy (PubMed/26083323).

Immunogen

Purified recombinant human PPP1A protein fragments expressed in E.coli

Gene ID

5499

Swiss Prot

P62136

Synonyms

PP-1A; PPP1A; PP1alpha

Reactivity

Human

Application

WB, IHC-Fr, IHC-P, ICC/IF

Recommended dilution

WB: 1:500-1:1000

	IHC: 1:50-1:100 ICC/IF: 1:50-1:200
Calculated MW	38 kDa
Observed MW	38 kDa
Host species	Mouse
Clonality	Monoclonal
Clonality No.	1C11-C10-H5-E9
Isotype	IgG1
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in PBS, 50% Glycerol(pH 7.3), 0.02% sodium azide and 0.5% BSA . Stable for 12 months from date of receipt.

□ Western blot analysis of PPP1A in K562, 3T3 and Hela lysates using PPP1A antibody.