

## OriGene Technologies, Inc.

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## **Product datasheet for TA347022**

## PPP1A (PPP1CA) Mouse Monoclonal Antibody [Clone ID: 1H1-F7-D8]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 1H1-F7-D8

**Applications:** IF, WB

**Recommend Dilution:** WB: 1:1000, IF: 1:50

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** The immunogen for PPP1CA antibody: purified recombinant human PPP1A protein fragments

expressed in E.coli.

Formulation: Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with

0.02% sodium azide, 50%, glycerol

**Purification:** Affinity purified

Predicted Protein Size: 37 kDa

**Gene Name:** protein phosphatase 1 catalytic subunit alpha

Database Link: NP 001008709 Entrez Gene 5499 Human

**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.

Synonyms: PP-1A; PP1A; PP1alpha; PPP1A

**Protein Families:** Druggable Genome, Phosphatase

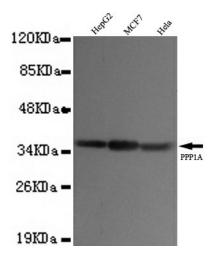
**Protein Pathways:** Focal adhesion, Insulin signaling pathway, Long-term potentiation, Oocyte meiosis, Regulation

of actin cytoskeleton, Vascular smooth muscle contraction

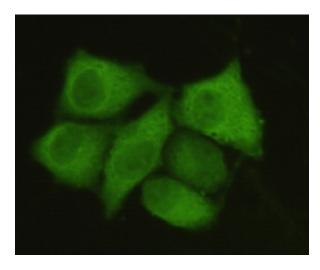




## **Product images:**



Western blot detection of PPP1A in HepG2, MCF7 and Hela cell lysates using PPP1A mouse mAb (1:1000 diluted).Predicted band size:37KDa.Observed band size:37KDa.



Immunocytochemistry of HeLa cells using anti-PPP1A mouse mAb diluted 1:50.