

## Product datasheet for **TA808819M**

### PPP1A (PPP1CA) Mouse Monoclonal Antibody [Clone ID: OTI6E5]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI6E5
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PPP1CA(NP_001008709) produced in E.coli.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	38.5 kDa
Gene Name:	protein phosphatase 1 catalytic subunit alpha
Database Link:	<a href="#">NP_001008709</a> <a href="#">Entrez Gene 19045 Mouse</a> <a href="#">Entrez Gene 24668 Rat</a> <a href="#">Entrez Gene 5499 Human</a> <a href="#">P62136</a>


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**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]

**Synonyms:**

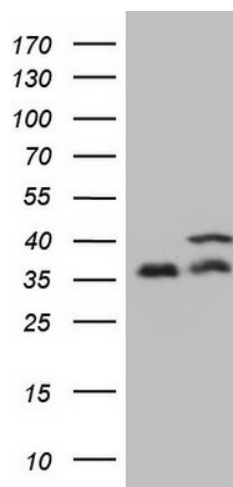
PP-1A; PP1A; PP1alpha; PPP1A

**Protein Families:**

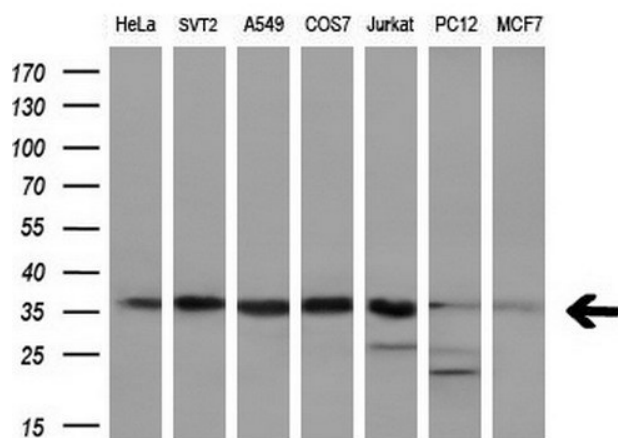
Druggable Genome, Phosphatase

**Protein Pathways:**

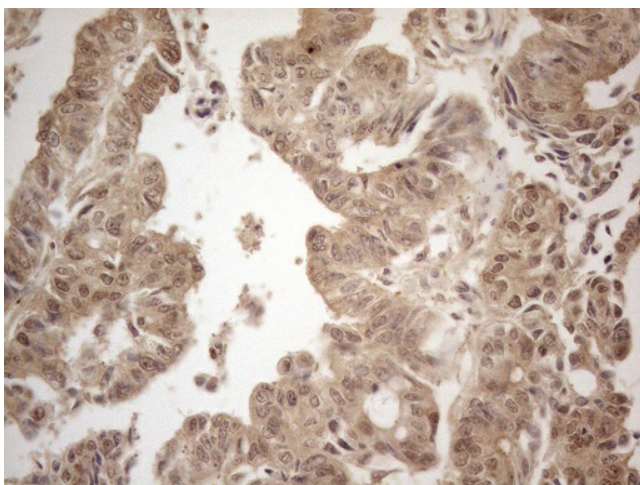
Focal adhesion, Insulin signaling pathway, Long-term potentiation, Oocyte meiosis, Regulation of actin cytoskeleton, Vascular smooth muscle contraction

**Product images:**


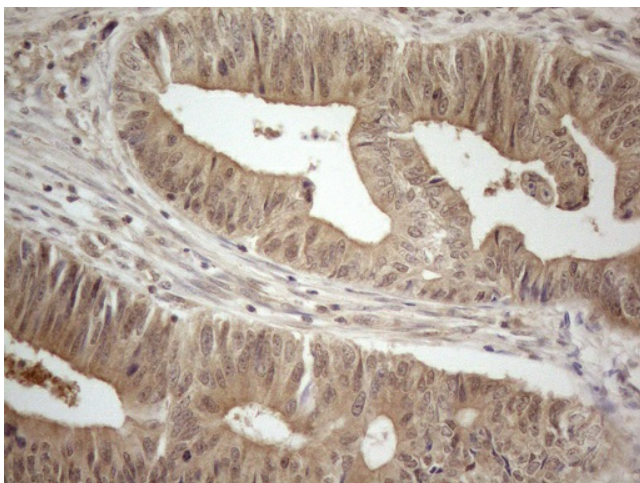
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PPP1CA (Cat# [RC212268], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PPP1CA (1:2000) (Cat# [TA808819]). Positive lysates [LY423356] (100ug) and [LC423356] (20ug) can be purchased separately from OriGene.



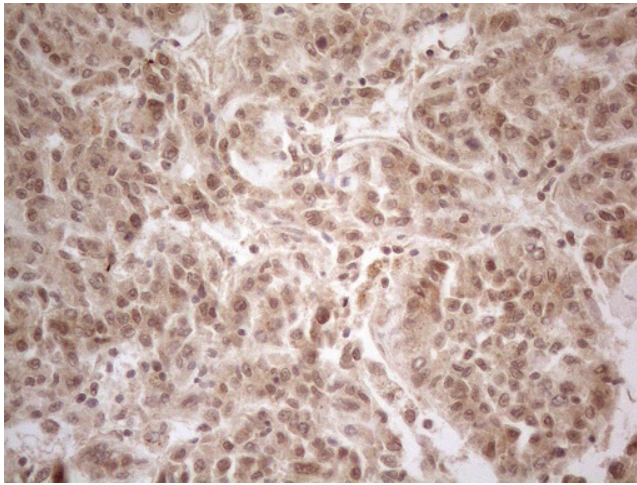
Western blot analysis of extracts (10ug) from 7 different cell lines by using anti-PPP1CA monoclonal antibody (1:200).



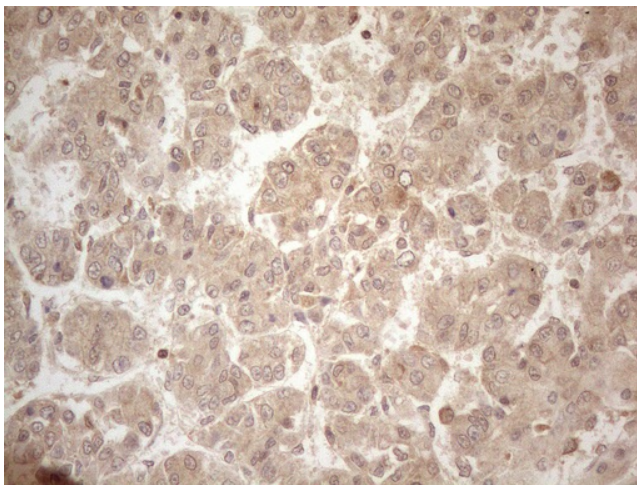
Immunohistochemical staining of paraffin-embedded Human colon tissue using anti-PPP1CA mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



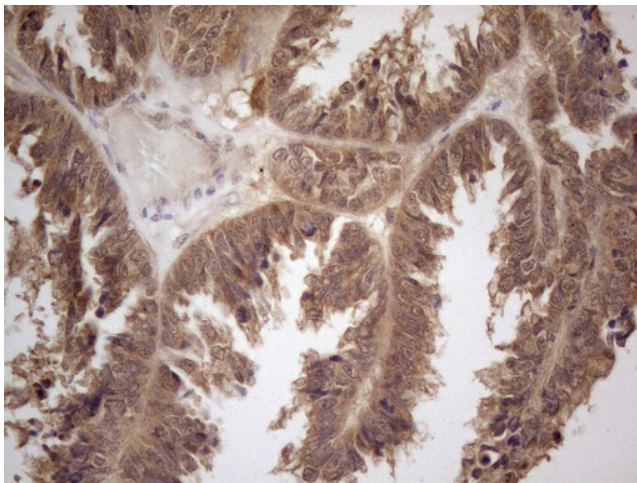
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-PPP1CA mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



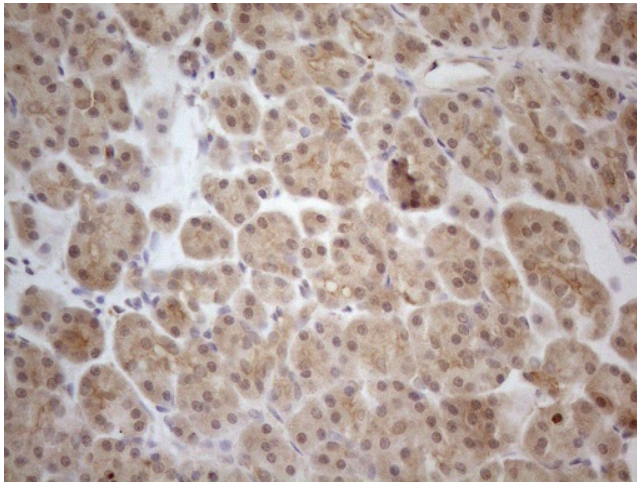
Immunohistochemical staining of paraffin-embedded Human liver tissue using anti-PPP1CA mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



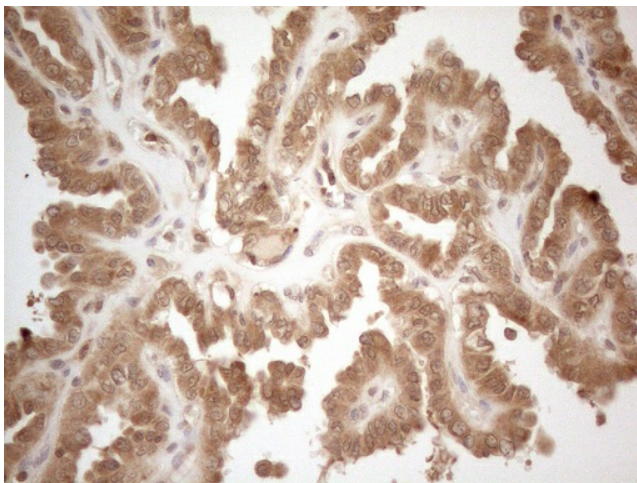
Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-PPP1CA mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



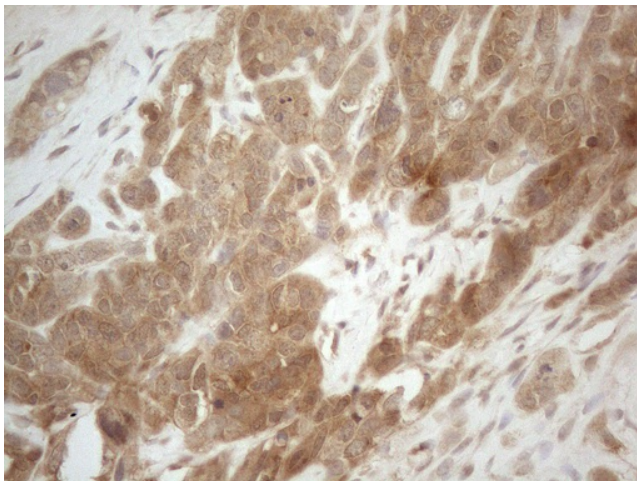
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-PPP1CA mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human pancreas tissue using anti-PPP1CA mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human thyroid tissue using anti-PPP1CA mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-PPP1CA mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.