

## Product datasheet for **AP20858PU-M**

### PPP1R14A pThr38 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500 - 1/1000. <b>Immunohistochemistry on paraffin sections</b> 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of CPI-17 protein only when phosphorylated at Thr38.
Formulation:	Phosphate buffered saline (PBS), pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 22 kDa
Gene Name:	protein phosphatase 1 regulatory inhibitor subunit 14A
Database Link:	<u><a href="#">Entrez Gene 68458 Mouse</a></u> <u><a href="#">Entrez Gene 114004 Rat</a></u> <u><a href="#">Entrez Gene 94274 Human</a></u> <u><a href="#">Q96A00</a></u>



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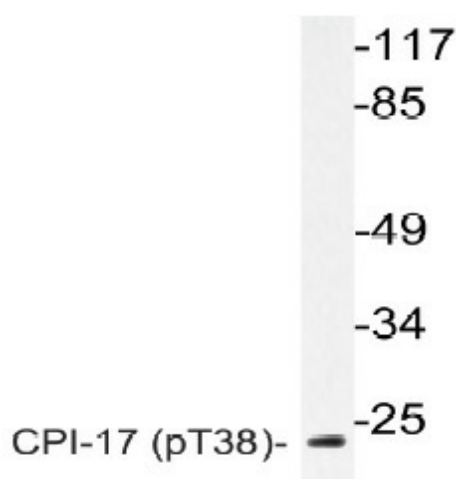
**Background:** CPI-17 is a phosphorylation-dependent inhibitory protein for smooth muscle Myosin phosphate. CPI-17 was originally identified as a 17 kDa PKC-potentiated inhibitory protein of protein phosphatase-1, which is dominantly expressed in smooth muscle. Phosphorylation at Threonine 38, in vitro, by PKC or Rho-kinase enhances the inhibitory potency toward myosin phosphatase. CPI-17 is also phosphorylated at Threonine 38 by protein kinase N and might be involved in the calcium sensitization of smooth muscle contraction as a downstream effector of Rho and/or arachidonic acid. CPI-17 is dually phosphorylated at Serine 12 and Threonine 38 by a MYPT-associated kinase, M110 kinase.

**Synonyms:** Protein phosphatase 1 regulatory subunit 14A, CPI-17, CPI17, PPP1INL

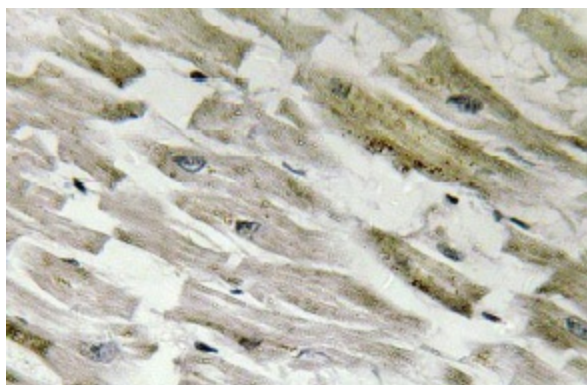
**Protein Families:** Druggable Genome

**Protein Pathways:** Vascular smooth muscle contraction

### Product images:



Western blot (WB) analysis of p-CPI-17 antibody (Cat.-No.: [AP20858PU-N]) in extracts from RAW264.7 cell



Immunohistochemistry (IHC) analysis of p-CPI-17 antibody (Cat.-No.: [AP20858PU-N]) in paraffin-embedded human heart tissue.