

## Recombinant Human PPP1R14A Protein (His Tag)

Catalog No. PKSH032967

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

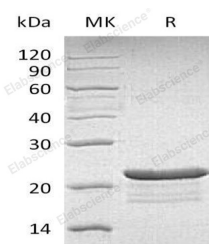
### Description

<b>Synonyms</b>	Protein Phosphatase 1 Regulatory Subunit 14A;17 kDa PKC-Potentiated Inhibitory Protein of PP1;Protein Kinase C-Potentiated Inhibitor Protein of 17 kDa;CPI-17;PPP1R14A;CPI17;PPP1INL
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Met 1-Pro147
<b>Accession</b>	Q96A00
<b>Calculated Molecular Weight</b>	17.8 kDa
<b>Observed molecular weight</b>	23-26 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 0.2mM EDTA, 1mM DTT, 10% Glycerol, pH 8.0.
<b>Reconstitution</b>	Not Applicable

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Protein Phosphatase 1 Regulatory Subunit 14A (PPP1R14A) belongs to the PP1 inhibitor family. PPP1R14A is mapped to chromosome 19q13.13-q13.2. PPP1R14A binds directly to protein kinase C and casein kinase I. Meantime; PPP1R14A is a phosphorylation-dependent inhibitor of smooth muscle myosin phosphatase. PPP1R14A is the inhibitor

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of PPP1CA. When phosphorylated; PPP1R14A has over 1000-fold higher inhibitory activity; creating a molecular switch for regulating the phosphorylation status of PPP1CA substrates and smooth muscle contraction. In addition; inhibition of PPP1R14A also enhances contraction of smooth muscle in the absence of increment of intracellular  $\text{Ca}^{2+}$  concentration.