

Recombinant Human PPP1R14A Protein (His Tag)

Catalog Number: PKSH032967

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

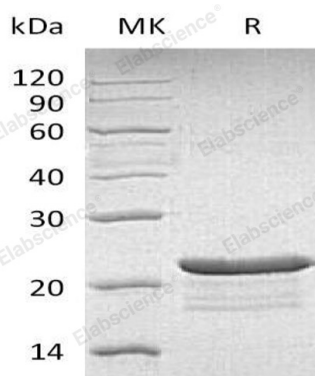
Description

Species	Human
Source	E.coli-derived Human PPP1R14A protein Met 1-Pro147, with an C-terminal His
Calculated MW	17.8 kDa
Observed MW	23-26 kDa
Accession	Q96A00
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	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.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 0.2mM EDTA, 1mM DTT, 10% Glycerol, pH 8.0.

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 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 Ca²⁺ concentration.