

## Recombinant Human PPP3R1 Protein (His Tag)

**Catalog Number:** PKSH030576

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

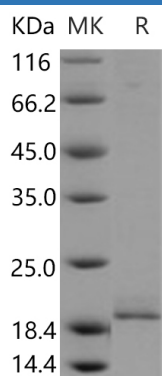
### Description

<b>Species</b>	Human
<b>Source</b>	Baculovirus-Insect Cells-derived Human PPP3R1 protein Gly2-Val170, with an N-terminal His
<b>Calculated MW</b>	21.4 kDa
<b>Observed MW</b>	20 kDa
<b>Accession</b>	P63098
<b>Bio-activity</b>	Using the Octet RED System, the affinity constant (Kd) of human PPP3R1-His bound to Human PPIA-His was 6 nM.

### Properties

<b>Purity</b>	> 87 % 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>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0, 10% glycerol, 2mM DTT Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 87 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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PPP3R1 belongs to the calcineurin regulatory subunit family. It is a regulatory subunit of calcineurin. Calcineurin is composed of two subunits: calcineurin A (CnA) and calcineurin B (CnB). Dephosphorylation of the nuclear factor of activated T-cells (NF-AT) by Calcineurin is essential for NF-AT activation; nuclear translocation; and early gene expression in T-cells. PPP3R1 is a Ser/Thr-specific calcium and calmodulin-dependent protein phosphatase which takes a vital part in the T cell activation pathway. PPP3R1 is involved in protein dephosphorylation; NFAT protein import into nucleus (ortholog) and epithelial to mesenchymal transition (ortholog). It participates in calcineurin signaling pathway; mitogen activated protein kinase signaling pathway. PPP3R1 interacts with (+)-pilocarpine; 2,4-dinitrotoluene and ammonium chloride. It contains four EF-hand domains and four functional calcium-binding sites. PPP3R1 play an important role in the T cell activation pathway.