

Product datasheet for TP760246

OriGene Technologies, Inc.

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PPP1A (PPP1CA) (NM_001008709) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human protein phosphatase 1, catalytic subunit, alpha isozyme

(PPP1CA), transcript variant 3, full length, with N-terminal HIS tag, expressed in E.Coli, 50ug

Species: Human

Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

A DNA sequence encoding human full-length PPP1CA

Tag: N-His

Predicted MW: 38.5 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 1% sarkosyl, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeg: NP 001008709

Locus ID: 5499

UniProt ID: <u>P62136</u>, <u>A0A140VJS9</u>, <u>P62136-2</u>

RefSeq Size: 1521

Cytogenetics: 11q13.2

RefSeq ORF: 1023

Synonyms: PP-1A; PP1A; PP1alpha; PPP1A





Summary:

The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). This broadly expressed gene encodes the alpha subunit of the PP1 complex that associates with over 200 regulatory proteins to form holoenzymes which dephosphorylate their biological targets with high specificity. 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 suggest that PP1 is an important regulator of cardiac function and that PP1 deregulation is implicated in diabetes and multiple types of cancer. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2020]

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:

