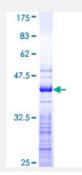


PPM1D (Human) Recombinant Protein (Q01)

Catalog # H00008493-Q01 Size 25 ug, 10 ug

Applications



Specification	
Product Description	Human PPM1D partial ORF (NP_003611, 496 a.a 605 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	IGLVPTNSTNTVMDQKNLKMSTPGQMKAQEIERTPPTNFKRTLEESNSGPLMKKHRRNGLSRSSG AQPASLPTTSQRKNSVKLTMRRRLRGQKKIGNPLLHQHRKTVCVC
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	37.84
Interspecies Antigen Sequence	Mouse (88); Rat (88)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PPM1D	
Entrez GenelD	<u>8493</u>
GeneBank Accession#	<u>NM_003620</u>
Protein Accession#	<u>NP_003611</u>
Gene Name	PPM1D
Gene Alias	PP2C-DELTA, WIP1
Gene Description	protein phosphatase 1D magnesium-dependent, delta isoform
Omim ID	<u>114480 605100</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatas es. PP2C family members are known to be negative regulators of cell stress response pathways. The expression of this gene is induced in a p53-dependent manner in response to various environ mental stresses. While being induced by tumor suppressor protein TP53/p53, this phosphatase n egatively regulates the activity of p38 MAP kinase, MAPK/p38, through which it reduces the phos phorylation of p53, and in turn suppresses p53-mediated transcription and apoptosis. This phosp hatase thus mediates a feedback regulation of p38-p53 signaling that contributes to growth inhibit ion and the suppression of stress induced apoptosis. This gene is located in a chromosomal regi on known to be amplified in breast cancer. The amplification of this gene has been detected in bo th breast cancer cell line and primary breast tumors, which suggests a role of this gene in cancer development. [provided by RefSeq
Other Designations	p53-induced protein phosphatase 1 protein phosphatase 1D protein phosphatase 2C delta isofor m protein phosphatase Wip1

Pathway



• p53 signaling pathway

Disease

• Tobacco Use Disorder