

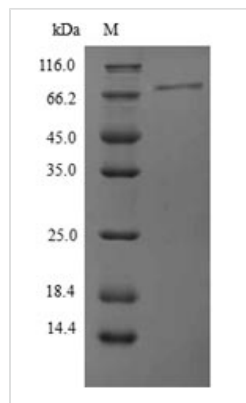


# Recombinant Human Protein phosphatase 1 regulatory subunit 15A (PPP1R15A), partial

<b>Product Code</b>	CSB-YP018528HU
<b>Relevance</b>	Recruits the serine/threonine-protein phosphatase PP1 to dephosphorylate the translation initiation factor eIF-2A/EIF2S1, thereby reversing the shut-off of protein synthesis initiated by stress-inducible kinases and facilitating recovery of cells from stress. Down-regulates the TGF-beta signaling pathway by promoting dephosphorylation of TGFB1 by PP1. May promote apoptosis by inducing TP53 phosphorylation on 'Ser-15'.
<b>Abbreviation</b>	Recombinant Human PPP1R15A protein, partial
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	O75807
<b>Alias</b>	Growth arrest and DNA damage-inducible protein GADD34 Myeloid differentiation primary response protein MyD116 homolog
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	<p>GPLEPWLVEAVKGAALVEAGLEGEARTPLAIPHTPWGRRPEEEAEDSGGPGGE  DRETLGLKTSSSLPEAWGLLDDDDGMYGEREATSVPRGQGSQFADGQRAPL  SPSLLIRTLQGSDKNPGEEKAE EEGVAEEEGVNKFSYPPSHRECCPAVEEED  DEEAVKKEAHRTSTSALSPGSKPSTWVSCPGEEENQATEDKRTERSKGARKT  SVSPRSSGSDPRSWEYRSGEASEEKEEKAHKETGKGEEAAPGPQSSAPAQR  QLKSWWCQPSDEEEGEVKALGAAEKDGEAECPPCIPPSAFLKAWVYWPGE  DTEEEDEEEDESDSGSDEEEGEAEASSSTPATGVFLKSWVYQPGEDTEEE  EDEDSDTGSAEDEREAEASTPPASAFLKAWVYRPGEDTEEEDEDEDVDS  KEDDSEAALGEAESDPHPSHPDQRAHFRGWGYRPGKETEEEEAAEDWGEA  EPCPFRVAIYVPGEKPPPPWAPPRLPLRLQRRLLKRPETPTHDPDPETPLKARK  VRFSEKVTVHFLAVWAGPAQAARQGPWEQLARDRSRFARRITQAQEELSPCL  TPAARARAWARLRNPPLAPIALTQTLPSSSVPSSPVQTTPLSQAVATPSRSS  AAAAAALDLSGRRG</p>
<b>Research Area</b>	Epigenetics and Nuclear Signaling
<b>Source</b>	Yeast
<b>Target Names</b>	PPP1R15A
<b>Protein Names</b>	Recommended name: Protein phosphatase 1 regulatory subunit 15A Alternative name(s): Growth arrest and DNA damage-inducible protein GADD34 Myeloid differentiation primary response protein MyD116 homolog



<b>Expression Region</b>	40-674aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-tagged
<b>Mol. Weight</b>	71.1kDa
<b>Protein Length</b>	Partial

**Image**


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

**Description**

An ORF cDNA corresponding to the peptide of human protein phosphatase 1 regulatory subunit 15A (PPP1R15A) was expressed with an N-terminal 6xHis-tag in the yeast cells. PPP1R15A CSB-YP018528HU is a truncated molecule having amino acids of Gly40-Gly674. Its purity is greater than 90% measured by SDS-PAGE. A molecular mass band of about 75 kDa was presented on the SDS-PAGE gel under reducing conditions. This recombinant PPP1R15A protein may find uses in the specific antibody synthesis or the studies of epigenetics and nuclear signal transduction.

PPP1R15A, also called GADD34, is transcriptionally induced by stress, downstream of cAMP?dependent transcription factor ATF4, and C/EBP homologous protein. Its translation escapes the general attenuation of protein synthesis resulting from eIF2 $\alpha$  phosphorylation. The stress?induced eIF2 $\alpha$  holohosphatase promotes dephosphorylation of eIF2 $\alpha$  in stressed cells, thereby allowing protein synthesis to resume. Thus, PPP1R15A?PP1 is a crucial effector of the negative feedback loop that shifts cells away from stress to basal activity.

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

**Shelf Life**

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