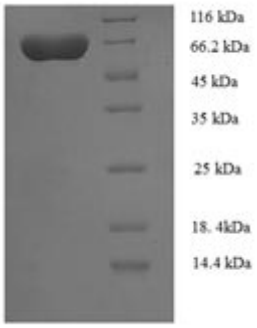
Recombinant Human UTP--glucose-1-phosphate uridylyltransferase (UGP2)

Product Code	CSB-EP620986HU
Relevance	Plays a central role as a glucosyl donor in cellular metabolic pathways.
Abbreviation	Recombinant Human UGP2 protein
Storage	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.
Uniprot No.	Q16851
Alias	UDP-glucose pyrophosphorylase ;UDPGP ;UGPase
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MSQDGASQFQEVIRQELELSVKKELEKILTTASSHEFEHTKKDLDGFRKLFHRF LQEKGPSVDWGKIQRPPEDSIQPYEKIKARGLPDNISSVLNKLVVVKLNGGLGT SMGCKGPKSLIGVRNENTFLDLTVQQIEHLNKTYNTDVPLVLMNSFNTDEDTK KILQKYNHCRVKIYTFNQSRYPRINKESLLPVAKDVSYSGENTEAWYPPGHGDI YASFYNSGLLDTFIGEGKEYIFVSNIDNLGATVDLYILNHLMNPPNGKRCEFVM EVTNKTRADVKGGTLTQYEGKLRLVEIAQVPKAHVDEFKSVSKFKIFNTNNLWI SLAAVKRLQEQNAIDMEIIVNAKTLDGGLNVIQLETAVGAAIKSFENSLGINVPR SRFLPVKTTSDLLLVMSNLYSLNAGSLTMSEKREFPTVPLVKLGSSFTKVQDYL RRFESIPDMLELDHLTVSGDVTFGKNVSLKGTVIIIANHGDRIDIPPGAVLENKIV SGNLRILDH
Research Area	Cancer
Source	E.coli
Target Names	UGP2
Expression Region	1-497aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	71.7kDa
Protein Length	Full Length of Isoform 2
Image	



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

Description

The expression region of this recombinant Human UGP2 covers amino acids 1-497. The calculated molecular weight for this UGP2 protein is 71.7 kDa. Expression of this UGP2 protein is conducted in e.coli. Fusion of the N-terminal 6xHis-SUMO tag into the UGP2 encoding gene fragment was conducted, allowing for easier detection and purification of the UGP2 protein in subsequent stages.

Human UTP-Glucose-1-Phosphate Uridylyltransferase (UGP2) is a key enzyme in glycogen metabolism, catalyzing the formation of UDP-glucose. UGP2 plays a vital role in glucose homeostasis, contributing to glycogen synthesis and storage. In metabolic research, UGP2 is crucial for understanding carbohydrate metabolism and its dysregulation in diseases like diabetes. Furthermore, UGP2's involvement in nucleotide sugar biosynthesis makes it relevant in glycosylation pathways, impacting cell signaling and immune responses. Studying UGP2 provides insights into its roles in diverse cellular processes, offering potential applications in metabolic disorders, glycosylation-related diseases, and therapeutic strategies targeting glycogen metabolism and related pathways.

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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