

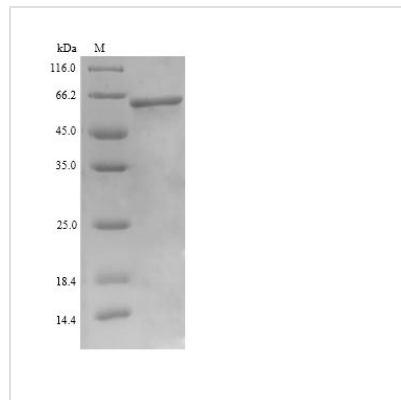


# Recombinant Human UDP-N-acetylhexosamine pyrophosphorylase (UAP1)

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>      | CSB-YP618067HU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Relevance</b>         | Converts UTP and GlcNAc-1-P into UDP-GlcNAc, and UTP and GalNAc-1-P into UDP-GalNAc. Isoform AGX1 has 2 to 3 times higher activity towards GalNAc-1-P, while isoform AGX2 has 8 times more activity towards GlcNAc-1-P.                                                                                                                                                                                                                                                                                                                                                      |
| <b>Abbreviation</b>      | Recombinant Human UAP1 protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <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>       | Q16222                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Alias</b>             | Antigen X ;AGX;Sperm-associated antigen 2;AGX-1;AGX-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <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>          | MNINDLKLTLKAGQEHLRFWNELEEAQQVELYAELQAMNFEELNFFFQKAI<br>EGFNQSSHQKNVDARMEPVPREVLGSATRDQDQLQAWSEGLFQISQNKVA<br>VLLLAGGQGTRLGVAYPKGMYDVGLPSRKTFLQIQAERILKLQQVAEKYYGNK<br>CIIPWYIMTSGRTMESTKEFFTKHKYFGLKKENVIFFQQGMLPAMSF DGKIILEE<br>KNKVSMAPDGNNGGLYRALAAQNIVEDMEQRGIWSIHVYCVDNILVKVADPRFI<br>GFCIQKGADCGAKVVEKTNPTPEVGVVCRVDGVYQVVEYSEISLATAQKRSS<br>DGRLLFNAGNIANHFFTVPFLRDVVNVYEPQLQHHVAQKKIPYVDTQGQLIKPD<br>KPNGIKMEKFVDFIQFAKKFVVYEVLRDEFSP LKNADSQNGKDNPTTARHA<br>LMSLHHCWVLNAGGHFIDENGSR LPAIPRSATNGKSETITADVNHNLKDANDV<br>PIQCEISPLISYAGEGLESYVADKEFHAPLIIDENGVELVKNGI |
| <b>Research Area</b>     | Signal Transduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>            | Yeast                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Target Names</b>      | UAP1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Protein Names</b>     | Recommended name: UDP-N-acetylhexosamine pyrophosphorylase Alternative name(s): Antigen X Short name= AGX Sperm-associated antigen 2 Including the following 2 domains: UDP-N-acetylgalactosamine pyrophosphorylase EC= 2.7.7                                                                                                                                                                                                                                                                                                                                                |
| <b>Expression Region</b> | 1-522aa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <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>       | 60.8kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |


**Protein Length**

Full Length

**Image**


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

**Description**

The recombinant Human UAP1 protein production in Yeast cells involves the integration of a DNA fragment encoding the Human UAP1 protein (1-522aa) into a plasmid vector, which is then introduced into Yeast cells. Following screening, positive cells are cultured and induced to synthesize the UAP1 protein. A N-terminal 6xHis tag is attached to the protein. Cell lysis is carried out to harvest the recombinant Human UAP1 protein, which is purified through affinity purification and then analyzed using SDS-PAGE and subsequent staining of the gel with Coomassie Brilliant Blue. The purity of the resulting recombinant Human UAP1 protein reaches over 90%.

**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**

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.