

## UAP1 Protein, Human (P.pastoris, His)

<b>Cat. No.:</b>	HY-P71817
<b>Synonyms:</b>	AGX 1; AGX-2; AGX1; Antigen X; AntigenX; SPAG 2; SPAG2; Sperm associated antigen 2; Sperm-associated antigen 2; UAP 1; uap1
<b>Species:</b>	Human
<b>Source:</b>	P. pastoris
<b>Accession:</b>	Q16222 (1M-522I)
<b>Gene ID:</b>	6675
<b>Molecular Weight:</b>	Approximately 60.8 kDa

### PROPERTIES

#### AA Sequence

```

MNINDLKLTL    SKAGQEHLR    FWNELEEAQQ    VELYAELQAM
NFEELNFFFQ    KAIIEGFNQSS    HQKNVDARME    PVPREVLGSA
TRDQDQLQAW    ESEGLFQISQ    NKVAVLLLAG    GQGTRLGVA
PKGMYDVGLP    SRKTLFQIQ    ERILKLQQVA    EKYYGNKCI
PWYIMTSGRT    MESTKEFFT    HKYFGLKKEN    VIFFQQGMLP
AMSFDGKII    EEKNKVSMA    DGNGGLYRAL    AAQNIVEDME
QRGIWSIHVY    CVDNILVKVA    DPRFIGFCIQ    KGADCGAKVV
EKTNPTEPVG    VVCRVDGVYQ    VVEYSEISLA    TAQKRSSDGR
LLFNAGNIAN    HFFTVPFLRD    VNVYEPQLQ    HHVAQKKIPY
VDTQGQLIKP    DKPNGIKMEK    FVFDIFQFAK    KFVVYEVLRE
DEFSPLKNAD    SQNGKDNPTT    ARHALMSLHH    CWVLNAGGHF
IDENGSRLPA    IPRSATNGKS    ETITADVNH    LKDANDVPIQ
CEISPLISYA    GEGLESYVAD    KEFHAPLIID    ENGVHELKNG
GI
  
```

**Biological Activity** The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

**Appearance** Lyophilized powder.

**Formulation** Lyophilized after extensive dialysis against solution in Tris-based buffer, 50% glycerol.

**Endotoxin Level** <1 EU/μg, determined by LAL method.

**Reconstitution** It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH<sub>2</sub>O.

**Storage & Stability** Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

**Shipping** Room temperature in continental US; may vary elsewhere.

## DESCRIPTION

### Background

Uridine diphosphate-N-acetylglucosamine (UDP-GlcNAc) and uridine diphosphate-N-acetylgalactosamine (UDP-GalNAc) are crucial nucleotide sugars involved in glycosylation processes, and the UAP1 protein plays a central role in their synthesis. UAP1 converts uridine triphosphate (UTP) in conjunction with either GlcNAc-1-P or GalNAc-1-P to generate UDP-GlcNAc or UDP-GalNAc, respectively. Interestingly, isoform AGX1 of UAP1 exhibits 2 to 3 times higher activity towards GalNAc-1-P, emphasizing its preference for galactosamine, while isoform AGX2 displays 8 times greater activity towards GlcNAc-1-P, highlighting its specificity for N-acetylglucosamine. The differential activities of these isoforms underscore the versatility of UAP1 in contributing to the generation of distinct nucleotide sugars, crucial for various glycosylation events in cellular processes.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA