NKMAXBio We support you, we believe in your research Recombinant human Ornithine Carbamoyltransferase/OTC protein

Catalog Number: ATGP1473

# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 33-354aa

**UniProt No.** P00480

NCBI Accession No. NP\_000522.3

**Alternative Names** ornithine carbamoyltransferase, OCTD, OTCase

# **PRODUCT SPECIFICATION**

Molecular Weight 38.9 kDa (347aa) confirmed by MALDI-TOF

**Concentration** 0.5mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM MES buffer (pH 6.0) containing 2mM DTT, 10% glycerol, 100mM NaCl

**Purity** > 95% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### Description

OTC, also called ornithine carbamoyltransferase, belongs to the ATCase/OTCase family. OTC plays a vital role in the urea cycle, catalyzing the second step in this pathway: the formation of L-citrulline from L-orthinine and carbamoyl phosphate. In humans, the urea cycle is an important pathway to detoxification of ammonia. Mutations in the gene encoding OTC are associated with the X-linked disorder OTCD (ornithine carbamoyltransferase deficiency). OTCD is a disorder of the urea cycle characterized by hyperammonemia. Recombinant human OTC protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using



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conventional chromatography techniques.

#### **Amino acid Sequence**

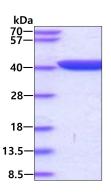
<MGSSHHHHHH SSGLVPRGSH MGSHM>NKVQL KGRDLLTLKN FTGEEIKYML WLSADLKFRI KQKGEYLPLL QGKSLGMIFE KRSTRTRLST ETGFALLGGH PCFLTTQDIH LGVNESLTDT ARVLSSMADA VLARVYKQSD LDTLAKEASI PIINGLSDLY HPIQILADYL TLQEHYSSLK GLTLSWIGDG NNILHSIMMS AAKFGMHLQA ATPKGYEPDA SVTKLAEQYA KENGTKLLLT NDPLEAAHGG NVLITDTWIS MGQEEEKKKR LQAFQGYQVT MKTAKVAASD WTFLHCLPRK PEEVDDEVFY SPRSLVFPEA ENRKWTIMAV MVSLLTDYSP QLQKPKF

#### **General References**

Trivedi, M., et al. (2001) J. Clin. Gastroenterol. 32: 340-343. Yamaguchi, S., et al. (2006) Hum. Mutat. 27: 626-632.

### DATA

#### **SDS-PAGE**



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

