

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-ornithine 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

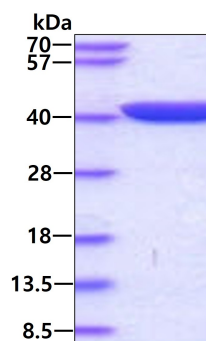
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QGKSLGMIFE KRSTRTRLST ETGFALLGGH PCFLTTQDIH LGVNESLTD T ARVLSSMADA VLARVYKQSD LDTLAKEASI
PIINGLSLDY HPIQILADYL TLQEHYSSLK GLTLSWIGDG NNILHSIMMS AAKFGMHLQA ATPKGYEPDA SVTKLAEQYA
KENGTKLLLT NDPLEAAHGG NVLITDTWIS MGQEEEEKKR LQAFQGYQVT MKTAKVAASD WTLHLCLPRK 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.