

Recombinant human POMC protein

Catalog Number: ATGP1088

PRODUCT INFORMATION

Expression system

E.coli

Domain

27-267aa

UniProt No.

P01189

NCBI Accession No.

NP_001030333

Alternative Names

Pro-opiomelanocortin preproprotein, ACTH, CLIP, LPH, MSH, NPP, POC

PRODUCT SPECIFICATION

Molecular Weight

28.9 kDa (262aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.5) containing 1mM DTT, 50% glycerol, 0.2M NaCl, 0.1mM PMSF, 100mM Imidazole

Purity

> 85% 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

Pro-opiomelanocortin preproprotein, also known as POMC, a polypeptide hormone precursor that undergoes extensive, tissue-specific, post-translational processing via cleavage by subtilisin-like enzymes known as prohormone convertases. It regulates the corticosteroid production in the adrenal cortex. Also, POMC is cleaved into ten hormone chains named NPP, gamma-MSH, ACTH, alpha-MSH, CLIP, Lipotropin beta, Lipotropin gamma, beta-MSH, beta endorphin and Met-enkephalin. Defects in the gene that encodes POMC are the cause of POMC

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deficiency, which is characterized by red hair and adrenal insufficiency. Recombinant human POMC protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH M>WCLESSQCQ DLTTESNLL CIRACKPDLS AETPMFPGNG DEQPLTENPR
KYVMGHFRWD RFGRRNSSSS GSSGAGQKRE DVSAGEDCGP LPEGGPEPRS DGAKEGREG KRSYSMEHFR
WGKPVGKKRR PVKVYPNGAE DESAEAFPLE FKRELTGQRL REGDGPDPGA DDGAGAQADL EHSLLVAAEK KDEGPYRMEH
FRWGSPPKDK RYGGFMTSEK SQTPLVTLFK NAIKNAYKK GE

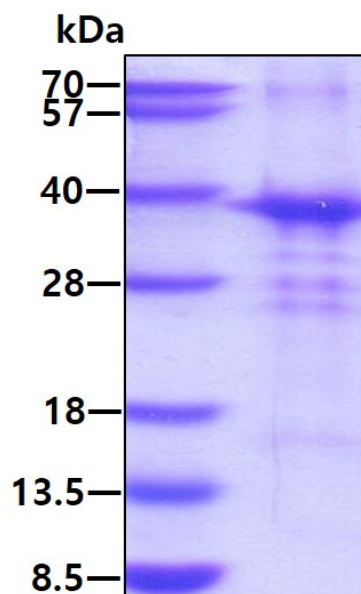
General References

Grassel S., et al. (2009) Arthritis Rheum. 60:3017-3027.

Belgardt B F., et al. (1992) J Physiol. 587:5305-5314.

DATA

SDS-PAGE



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