

AR39028PU-N

Human POMC (27-267, His-tag) - Purified

Alternate names:

Corticotropin-Lipotropin, Pro-opiomelanocortin

Quantity:

50 µg

Concentration:

0.25 mg/ml (determined by Bradford assay)

Background:

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, γ-MSH, ACTH, α-MSH, CLIP, Lipotropin β, Lipotropin γ, β-MSH, β endorphin and Met-enkephalin. Defects in the gene that encodes POMC are the cause of POMC deficiency, which is characterized by red hair and adrenal insufficiency.

Uniprot ID:

[P01189](#)

NCBI:

[NP_000930](#)

GeneID:

[5443](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >85%

Buffer System: 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 50% glycerol, 0.2M NaCl

Description:

Recombinant human POMC protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MWCLESSQCQ DLTTESNLL CIRACKPDLS AETPMFPGNG
DEQPLTENPR KYVMGHFRWD RFGRNRSSSS GSSGAGQKRE DVSAGEDCGP LPEGGPEPRS
DGAKPGPREG KRSYSMEHFR WGKPVGKKRR PVKVYPNGAE DESAEAFPLE FKRELTGQRL
REGDGPDPGA DDGAGAQADL EHSLLVAAEK KDEGPYRMEH FRWGSPPKDK RYGGFMTSEK
SQTPLVTLFK NAIKNAYKK GE

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

Storage:

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

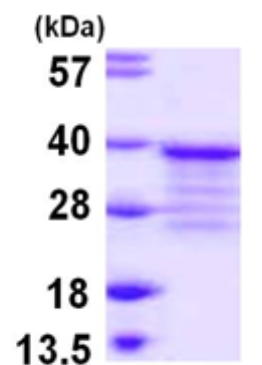
Shelf life: one year from despatch.

General Readings:

1. Grässel S, Opolka A, Anders S, Straub RH, Grifka J, Luger TA, et al. The melanocortin system in articular chondrocytes: melanocortin receptors, pro-opiomelanocortin, precursor proteases, and a regulatory effect of alpha-melanocyte-stimulating hormone on proinflammatory cytokines and extracellular matrix components. *Arthritis Rheum.* 2009 Oct;60(10):3017-27. doi: 10.1002/art.24846. PubMed PMID: 19790046.
2. Belgardt B F., et al. (1992) *J Physiol.* 587:5305-5314.

Pictures:

Recombinant human POMC, 27-267 aa,
His-tagged



15% SDS-PAGE (3ug)