

## Product datasheet for **AR39028PU-L**

### POMC (27-267, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	POMC (27-267, His-tag) human recombinant protein, 0.25 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MWCLESSQCQ DLTTESNLLE CIRACKPDLS AETPMFPGNG DEQPLTENPR KYVMGFHFRWD RFGRNSSSS GSSGAGQKRE DVSAGEDCGP LPEGGPEPRS DGAKPGPREG KRSYSMEHFR WGKPVGKKRR PVKVYPNGAE DESAEAFPLE FKRELTGQRL REGDGPDPGA DDGAGAQADL EHSLLVAAEK KDEGPYRMEH FRWGSPPKDK RYGGFMTSEK SQTPLVTLFK NAIKNAYKK GE
Tag:	His-tag
Predicted MW:	28.9 kDa
Concentration:	lot specific
Purity:	>85%
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.5) containing 1 mM DTT, 50% glycerol, 0.2M NaCl, 0.1 mM PMSF, 100 mM Imidazole
Preparation:	Liquid purified protein
Protein Description:	Recombinant human POMC protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
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.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_000930</u>
Locus ID:	5443
UniProt ID:	<u>P01189</u>
Cytogenetics:	2p23.3
Synonyms:	Pro-opiomelanocortin, Corticotropin-Lipotropin



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**Summary:**

This gene encodes a preproprotein that undergoes extensive, tissue-specific, post-translational processing via cleavage by subtilisin-like enzymes known as prohormone convertases. There are eight potential cleavage sites within the preproprotein and, depending on tissue type and the available convertases, processing may yield as many as ten biologically active peptides involved in diverse cellular functions. The encoded protein is synthesized mainly in corticotroph cells of the anterior pituitary where four cleavage sites are used; adrenocorticotrophin, essential for normal steroidogenesis and the maintenance of normal adrenal weight, and lipotropin beta are the major end products. In other tissues, including the hypothalamus, placenta, and epithelium, all cleavage sites may be used, giving rise to peptides with roles in pain and energy homeostasis, melanocyte stimulation, and immune modulation. These include several distinct melanotropins, lipotropins, and endorphins that are contained within the adrenocorticotrophin and beta-lipotropin peptides. The antimicrobial melanotropin alpha peptide exhibits antibacterial and antifungal activity. Mutations in this gene have been associated with early onset obesity, adrenal insufficiency, and red hair pigmentation. Alternatively spliced transcript variants encoding the same protein have been described. [provided by RefSeq, Jan 2016]

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Adipocytokine signaling pathway, Melanogenesis

**Product images:**
