

## 32-18426: Human POMC Protein, His Tag

**Uniprot ID :** P01189

**Alternative Name :** LPH; MSH; NPP; POC; ACTH; CLIP; OBAIRH

### Description

**Description :** Recombinant human POMC Protein with C-terminal 6 $\text{Å}$ —His tag

**Background :** 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.

**Molecular Characterization:** mass of 27.5 kDa after removal of the signal peptide. The apparent molecular mass of POMC-His is approximately 25-55 kDa due to glycosylation.

**Tag :** C-6 $\text{Å}$ —His tag

### Product Info

**Amount :** 50  $\mu\text{g}$  / 100  $\mu\text{g}$

**Purification :** The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

**Content :** Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization.

**Storage condition :** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

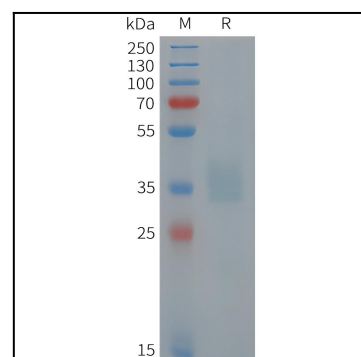


Figure 1. Human POMC Protein, His Tag on SDS-PAGE under reducing condition.