Recombinant Human Proopiomelanocortin, His-tagged

Cat. No. POMC-349H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant humanPOMC protein, fused to His-tag at N-terminus, was expressed in E. coli andpurified by using conventional chromatography techniques.
Species	Human
Source	Human
Description	Pro-opiomelanocortinpreproprotein, also known as POMC, a polypeptide hormone precursor thatundergoes extensive, tissue-specific, post-translational processing viacleavage by subtilisin-like enzymes known as prohormone convertases. Itregulates the corticosteroid production in the adrenal cortex. Also, POMC iscleaved into ten hormone chains named NPP, gamma-MSH, ACTH, alpha-MSH, CLIP,Lipotropin beta, Lipotropin gamma, Beta-MSH, Beta-endorphin andMet-enkephalin. Defects in the gene that encodes POMC are the cause of POMCdeficiency, which is characterized by red hair and adrenal insufficiency.
Concentration	0.25 mg/ml
Form	Suppliedas a liquid in 20mM Tris-HCl buffer, pH 8.0, containing 1mM DTT, 50% glyceroland 0.2M NaCl.
Purity	> 85% by SDS -PAGE
Sequence	27-267 amino acids:MGSSHHHHHH SSGLVPRGSH MWCLESSQCQ DLTTESNLLE CIRACKPDLS AETPMFPGNG DEQPLTENPRKYVMGHFRWD RFGRRNSSSS

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	GSSGAGQKRE DVSAGEDCGP LPEGGPEPRS DGAKPGPREG KRSYSMEHFRWGKPVGKKRR PVKVYPNGAE DESAEAFPLE FKRELTGQRL REGDGPDGPA DDGAGAQADL EHSLLVAAEKKDE
Molecular Mass	28.9 kDa(262aa), confirmed by MALDI-TOF (molecular weight on SDS-PAGE will appearhigher).
Applications	SDS-PAGE
Storage	Storeat 4 deg C for short term storage (1/2 weeks). Aliquot and store at -20 deg Cor -70 deg C for long term storage. Avoid repeated freeze/thaw cycles.
OfficialSymbol	POMC

GENE INFORMATION

Gene Name	POMC proopiomelanocortin [Homosapiens]
Synonyms	POMC;proopiomelanocortin; LPH; MSH; NPP; POC; ACTH; CLIP; pro-opiomelanocortin;beta-LPH; beta-MSH; alpha-MSH; gamma-LPH; gamma-MSH; beta-endorphin;met-enkephalin; lipotropin beta; lipotropin gamma; melanotropin beta;melanotropin alpha; melanotropin gamma; OTTHUMP00000119991;pro-ACTH-endorphin; polypeptide; preproprotein; OTTHUMP00000200964; OTTHUMP00000200965;OTTHUMP00000200966; adrenocorticotropin corticotropin-lipotropin;adrenocorticotropic hormone; corticotropin-like intermediary peptide;beta-melanocyte-stimulating hormone; alpha-melanocyte-stimulating hormone
Gene ID	5443
mRNA Refseq	NM_000939

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Protein Refseq	NP_000930
MIM	176830
UniProt ID	P01189
Chromosome Location	2p23.3
Pathway	Adipocytokinesignaling pathway; Class A/1 (Rhodopsin-like receptors); G alpha (i)signalling events; G alpha (s) signalling events; G-protein activation; GPCRdownstream signaling; GPCR ligand binding; Melanogenesis; Metabolism of aminoacids and derivatives; Opioid Signalling; Peptide hormone biosynthesis;Signaling by GPCR; Syndecan-3-mediated signaling events
Function	G-protein-coupledreceptor binding; hormone activity; receptor binding; type 1 melanocortinreceptor binding; type 2 melanocortin receptor binding; type 3 melanocortinreceptor binding; type 4 melanocortin receptor binding

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