



Human POMC blocking peptide (CDBP2400)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Blocking/Immunizing peptide for anti-Proopiomelanocortin/POMC antibody
Antigen Description	This gene encodes a polypeptide hormone precursor 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 polypeptide precursor 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. 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, Jul 2008]
Species	Human
Conjugate	Unconjugated
Applications	Apuri, BL, ELISA
Format	Lyophilized powder
Size	100 µg
Preservative	None
Storage	Shipped at ambient temperature, store at -20°C.

GENE INFORMATION

Gene Name	POMC proopiomelanocortin [Homo sapiens]
Official Symbol	POMC
Synonyms	POMC; proopiomelanocortin; pro-opiomelanocortin; ACTH; adrenocorticotrophic hormone; adrenocorticotropin; alpha melanocyte stimulating hormone; beta endorphin; beta lipotropin; beta melanocyte stimulating hormone; CLIP; LPH; MSH; NPP; POC; beta-LPH; beta-MSH; alpha-MSH; gamma-LPH; gamma-MSH; beta-endorphin; met-enkephalin; lipotropin beta; lipotropin gamma; melanotropin beta; melanotropin alpha; melanotropin gamma; pro-ACTH-endorphin; corticotropin-lipotropin; proopiomelanocortin preproprotein; beta-melanocyte-stimulating hormone; alpha-melanocyte-stimulating hormone; corticotropin-like intermediary peptide;
Entrez Gene ID	5443
mRNA Refseq	NM_000939
Protein Refseq	NP_000930
UniProt ID	P01189
Chromosome Location	2p23
Pathway	Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Androgen biosynthesis, organism-specific biosystem; Biological oxidations, organism-specific biosystem; Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; Cytochrome P450 - arranged by substrate type, organism-specific biosystem; Endogenous sterols, organism-specific biosystem;
Function	G-protein coupled receptor binding; hormone activity; hormone activity; receptor binding; type 1 melanocortin receptor binding; type 1 melanocortin receptor binding; type 3 melanocortin receptor binding; type 4 melanocortin receptor binding;