

Recombinant Human PENK, His-tagged

Cat. No. PENK-177H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Proenkephalin-A/PENK is produced by our mammalian expression system in human cells. The target protein is expressed with sequence (Glu25-Phe267) of Human PENK fused with a polyhistidine tag at the C-terminus.
Species	Human
Source	HEK293
ProteinLength	25-267 a.a.
Description	Proenkephalin-A is a secreted protein that belongs to the opioid neuropeptide precursor family. Proenkephalin-A is an endogenous opioid polypeptide hormone which, via proteolytic cleavage, produces the enkephalin peptides [Met]enkephalin, and to a lesser extent, [Leu]enkephalin. Met- and Leu-enkephalins compete with and mimic the effects of opiate drugs. They play a role in a number of physiologic functions, including pain perception and responses to stress. Proenkephalin-A (114-133) and Proenkephalin-A (237-258) increase glutamate release in the striatum. Proenkephalin-A (114-133) decreases GABA concentration in the striatum.
AA Sequence	ECSQDCATCSYRLVRPADINFLACVMECEGKLPSLKIWETCKELLQLSKPELPQDGT STLRENSK PEESHELLAKRYGGFMKRYGGFMKKMDELYPMEPEEEANGSEILAKRY GGFMKKDAEEDDSLANS DLLKELLETGDNRRERSHHQDGS DNEEEVSKRYGGFM RGLKRSPQLEDEAKELQKRYGGFMRRVGR PEWWMDYQKRYGGFLKRFAEALPS DEEGESYSKEVPEMEKRYGGFMRFVDHHHHHH

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Endotoxin	Less than 0.1 ng/μg (1 IEU/μg).
Purity	Greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.
GENE INFORMATION	
Gene Name	PENK proenkephalin [Homo sapiens]
Official Symbol	PENK
Synonyms	PENK; proenkephalin; proenkephalin-A; preproenkephalin; enkephalin A;
Gene ID	5179
mRNA Refseq	NM_001135690
Protein Refseq	NP_001129162
MIM	131330
UniProt ID	P01210
Chromosome Location	8q23-q24
Pathway	Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; G alpha (i) signalling events, organism-specific biosystem; GPCR downstream signaling, organism-specific biosystem; GPCR ligand binding, organism-specific biosystem; Peptide ligand-binding receptors, organism-specific biosystem; Signal Transduction, organism-specific biosystem; Signaling by GPCR, organism-specific biosystem;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Function

neuropeptide hormone activity; opioid peptide activity;

 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA