

Active Recombinant Human Calcitonin-related polypeptide alpha

Cat. No. CALCA-317H Lot. No. (See product label)

SPECIFICATION

Product Overview	Procalcitonin Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 116 amino acids and having a molecular mass of 12.7 kDa. The Procalcitonin is purified by standard chromatographic techniques.
Species	Human
Source	Human
Description	Procalcitonin is a peptide hormone mainly produced by the C cells of the thyroid and certain endocrine cells of the lung. Under normal expression conditions, procalcitonin is immediately cleaved into three specific fragments, an N terminal residue, calcitonin and katacalcin. Levels of unprocessed procalcitonin rise significantly after bacterial infection, trauma or shock.
Form	Lyophilized from 10mM sodium phosphate pH-7.5.
Purity	Greater than 97.0% as determined by(a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Bio-activity	Human Procalcitonin was tested using Biomerieux reagents on the Min-Vidas. The assay was run at 80 ng/ml with a recovery of 82 percent.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.

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Solubility	It is recommended to reconstitute the lyophilized procalcitonin sterile 18M μ -cm H ₂ O at 100 g/ml, which can then be further diluted to other aqueous solutions.
Amino acid sequence	APFRSALESS PADPATLSED EARLLLAALV QDYVQMKASE LEQEQEREGS SLDSPRSKRC GNLSTCMLGT YTQDFNKFHT FPQTAIGVGA PGKKRDMSSD LERDHRPHVS MPQNaN.
Storage	Lyophilized procalcitonin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution procalcitonin should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.


GENE INFORMATION

Gene Name	CALCA calcitonin-related polypeptide alpha [Homo sapiens]
Official Symbol	CALCA
Synonyms	Calcitonin; calcitonin gene-related peptide 1 ; CT; KC; CGRP; CALC1; CGRP1; CGRP-I; MGC126648; CALCA; calcitonin-related polypeptide alpha; katalcalcin; calcitonin 1; alpha-type CGRP
Gene ID	796
mRNA Refseq	NM_001033952
Protein Refseq	NP_001029124
MIM	114130

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UniProt ID	P01258
Chromosome Location	11P15.2
Pathway	Calcitonin-like ligand receptors, organism-specific biosystem; Calcitonin-like ligand receptors, organism-specific biosystem; Class B/2 (Secretin family receptors), organism-specific biosystem; G alpha (s) signalling events, organism-specific biosystem; GPCR downstream; signaling, organism-specific biosystem; GPCR ligand binding, organism-specific biosystem; Myometrial Relaxation and Contraction Pathways, organism-specific biosystem; Signaling by GPCR, organism-specific biosystem
Function	calcitonin receptor binding; hormone activity; protein binding; receptor binding
NMRsolution structure of salmon calcitonin in SDS micelles.	

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