Prouroguanylin Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Guanylate cyclase activator 2B, Guanylate cyclase C-activating peptide 2, Guanylate cyclase C-activating peptide II, GCAP-II, Uroguanylin, UGN, GUCA2B

Cat. No.:
RD172069100 (0.1 mg)

Description

Total 96 AA. MW: 10.7 kDa (calculated). N-Terminal His-tag (10 extra AA). UniprotKB acc.no. Q16661

Introduction to the Molecule

Prouroguanylin is a 112-amino-acid prohormone precursor of uroguanylin- mature biologically active 16-amino-acid peptide cleaved from its C-terminus. Guanylin binds to receptor-guanylate cyclases (CG-C) resulting in increased intracellular cGMP levels leading to CFTCR (Cystic Fibrosis Transmembrane Conductance Regulator) activation and subsequent rise in fluid and electrolyte secretion into the lumen. Prouroguanyline knock-out mice showed impaired renal excretion of external NaCl leasing to elevated blood pressure independent of the level of diatary salt intake.
Prouroguanylin is the predominant circulating molecular form found in circulation and in biological fluids.

Research topic

Oncology, Others, Renal disease

Amino Acid Sequence

MKHHHHHHAS VYIQYQGFRV QLESMKKLSD LEAQWAPSPR LQAQSLLPAV CHHPALPQDL QPVCASQEAS SIFKTLRTIA NDDCELCVNV ACTGCL

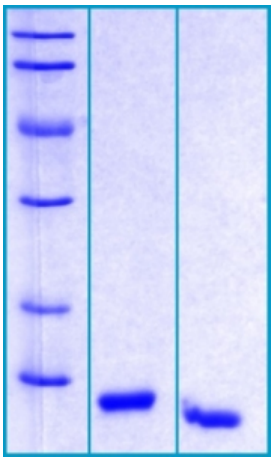
Source

E. coli

Purity

Purity as determined by densitometric image analysis: >95%

SDS-PAGE gel



12% SDS-PAGE separation of Human Prouroguanylin
1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa
2. reduced and heated sample, 2.5µg/lane
3. non-reduced and non-heated sample, 2.5µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

0.2-0.7 mg/ml in 20mM TRIS, 50mM NaCl, 20% (v/v) glycerol, pH 7.5 - filtered (0.4 µm), frozen

Reconstitution

Defrost at ambient temperature.

Shipping

At temperature 2 - 8°C Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store protein at -80°C. Protein remains stable until the expiry date when stored at -80°C. Avoid repeated freezing/thawing cycles.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL TEST to determine endotoxin level.

Applications

ELISA, Western blotting

Note

This product is intended for research use only.

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