

Recombinant human ENSA protein

Catalog Number: ATGP0457

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-121aa

UniProt No.

O43768

NCBI Accession No.

NP_004427

Alternative Names

Alpha endosulfine isoform 3, ARPP-19e, Alpha endosulfine isoform 3 Alpha endosulfine, ARPP 19e, Endosulfine alpha.

PRODUCT SPECIFICATION

Molecular Weight

15.5 kDa (141aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.2mM PMSF

Purity

> 85% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

ENSA, also known as alpha endosulfine, belongs to a highly conserved cAMP-regulated phosphoprotein (ARPP) family. This protein is expressed in a wide range of tissues including muscle, brain, and endocrine tissues. This protein was identified as an endogenous ligand for the sulfonylurea receptor, ABCC8/SuR1. ABCC8 is the regulatory subunit of the ATP-sensitive potassium (KATP) channel, which is located on the plasma membrane of pancreatic beta cells and plays a key role in the control of insulin release from pancreatic beta cells. This protein

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is thought to be an endogenous regulator of KATP channels. In vitro studies have demonstrated that this protein modulates insulin secretion through the interaction with KATP channel, and this gene has been proposed as a candidate gene for type 2 diabetes. Recombinant ENSA protein was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSSLVPRGSH MSQKQEEENP AEETGEEKQD TQEKEGILPE RAEEAKLKAK YPSLGQKPGG SDFLMKRLQK GQKYFDSGDY NMAKAKMKNK QLPSAGPDKN LVTGDHIPTP QDLPQRKSSL VTSKLAGGQV E

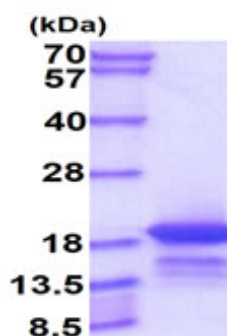
General References

Heron L., et al. (1998) Proc Natl Acad Sci U S A. 95(14):8387-91.

Kim SH., et al. (2001) J Neural Transm Suppl. 61:1-9.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3 μ g)