# NKMAXBIO We support you, we believe in your research

# Recombinant human ENSA protein

Catalog Number: ATGP0457

# **PRODUCT INFORMATION**

# **Expression system**

E.coli

#### **Domain**

1-121aa

#### **UniProt No.**

043768

#### **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



# NKMAXBio We support you, we believe in your research

# Recombinant human ENSA protein

Catalog Number: ATGP0457

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**

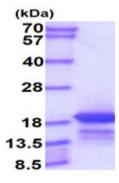
MGSSHHHHHH SSGLVPRGSH MSQKQEEENP AEETGEEKQD TQEKEGILPE RAEEAKLKAK YPSLGQKPGG SDFLMKRLQK GQKYFDSGDY NMAKAKMKNK QLPSAGPDKN LVTGDHIPTP QDLPQRKSSL VTSKLAGGQV E

#### **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**



15% SDS-PAGE (3ug)

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

