

### **ENSA Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10456c

#### **Specification**

# **ENSA Antibody (Center) - Product Information**

Application Primary Accession Other Accession

Reactivity Predicted

Host Clonality Isotype Calculated MW Antigen Region FC, WB,E <u>O43768</u> <u>O7ZXH9</u>, <u>P60841</u>, <u>P68211</u>, <u>P60840</u>, <u>O1L8X2</u>, <u>O5ZIF8</u>, <u>P68210</u>, <u>NP\_996927.1</u>, <u>NP\_996929.1</u> Human, Mouse Bovine, Chicken, Zebrafish, Pig, Rat, Xenopus Rabbit Polyclonal Rabbit IgG 13389 39-66

### ENSA Antibody (Center) - Additional Information

Gene ID 2029

**Other Names** Alpha-endosulfine, ARPP-19e, ENSA

#### Target/Specificity

This ENSA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 39-66 amino acids from the Central region of human ENSA.

**Dilution** FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ENSA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **ENSA Antibody (Center) - Protein Information**



## Name ENSA

**Function** Protein phosphatase inhibitor that specifically inhibits protein phosphatase 2A (PP2A) during mitosis. When phosphorylated at Ser-67 during mitosis, specifically interacts with PPP2R2D (PR55-delta) and inhibits its activity, leading to inactivation of PP2A, an essential condition to keep cyclin-B1-CDK1 activity high during M phase (By similarity). Also acts as a stimulator of insulin secretion by interacting with sulfonylurea receptor (ABCC8), thereby preventing sulfonylurea from binding to its receptor and reducing K(ATP) channel currents.

Cellular Location Cytoplasm.

**Tissue Location** 

Widely expressed with high levels in skeletal muscle and brain and lower levels in the pancreas

# **ENSA Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### ENSA Antibody (Center) - Images



ENSA Antibody (Center) (Cat. #AP10456c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the ENSA antibody detected the ENSA protein (arrow).





ENSA Antibody (Center) (Cat. #AP10456c) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the ENSA antibody detected the ENSA protein (arrow).



ENSA Antibody (Center) (Cat. #AP10456c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# ENSA Antibody (Center) - Background

### ENSA belongs to a highly

conserved cAMP-regulated phosphoprotein (ARPP) family. 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 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.

# ENSA Antibody (Center) - References

Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Olsen, J.V., et al. Cell 127(3):635-648(2006)



Olsen, J.V., et al. Cell 127(3):635-648(2006) Gabrielsson, B.G., et al. Mol. Cell. Biochem. 258 (1-2), 65-71 (2004) : Thameem, F., et al. Mol. Genet. Metab. 81(1):16-21(2004)