

ENSA Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10456c

Specification

ENSA Antibody (Center) - Product Information

Application FC, WB,E Primary Accession 043768

Other Accession <u>Q7ZXH9</u>, <u>P60841</u>, <u>P68211</u>, <u>P60840</u>, <u>Q1L8X2</u>,

O5ZIF8, P68210, NP 996927.1, NP 996929.1

Reactivity Human, Mouse

Predicted Bovine, Chicken, Zebrafish, Pig, Rat,

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 13389

ENSA Antibody (Center) - Additional Information

Gene ID 2029

Antigen Region

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.

39-66

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

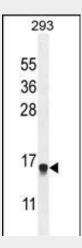
Widely expressed with high levels in skeletal muscle and brain and lower levels in the pancreas

ENSA Antibody (Center) - Protocols

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

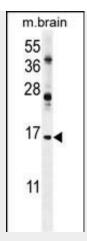
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ENSA Antibody (Center) - Images

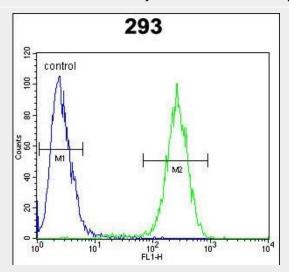


ENSA Antibody (Center) (Cat. #AP10456c) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the ENSA antibody detected the ENSA protein (arrow).





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.

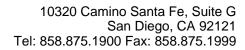
ENSA Antibody (Center) - Background

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)