10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ENSA Rabbit pAb

Catalog # AP97891

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O43768
Other Accession	O43768
Predicted	Rat, Human, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	13389
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ENSA/ARPP-19
Epitope Specificity	51-121/121
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the endosulfine family.
SUBUNIT	Interacts (when phosphorylated at Ser-67) with PPP2R2D. Interacts with ABCC8. Interacts with SNCA; interaction is disrupted when phosphorylated at Ser-109.
Post-translational modifications	Phosphorylation at Ser-67 by GWL during mitosis is essential for interaction with PPP2R2D (PR55-delta) and subsequent inactivation of PP2A (By similarity). Phosphorylated by PKA.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene 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. At least eight alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	2029
Other Names	ARPP-19e; 1700020C18Rik; 2610007F17Rik; ENSA_HUMAN; ENSA; ENSA_MOUSE; ENSA_RAT; endosulfine alpha
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-

	500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.