

Rabbit Anti-ENSA antibody

SL11793R

Product Name:	ENSA
Chinese Name:	α 内磺肽抗体
Alias:	Alpha endosulfine; ARPP 19e; Endosulfine alpha; ENSA_HUMAN; Alpha- endosulfine; ARPP-19e.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	13kDa
Cellular localization:	cytoplasmic 2
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ENSA/ARPP-19:51-121/121
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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]

Function:

ENSA (Alpha endosulfine) is expressed in a wide range of tissues including muscle, brain, and endocrine tissues. The recombinant protein inhibits binding of labeled glibenclamide to beta cell membranes. It also inhibits cloned K(ATP) channel currents and thereby stimulates insulin secretion. It was proposed that endosulfine is an endogenous regulator of the K(ATP) channel, which has a key role in the control of insulin release and, more generally, couples cell metabolism to electrical activity.

Subunit:

Interacts (when phosphorylated at Ser-67) with PPP2R2D. Interacts with ABCC8. Interacts with SNCA; interaction is disrupted when phosphorylated at Ser-109.

Subcellular Location: Cytoplasmic

Tissue Specificity:

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

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.

Similarity: Belongs to the endosulfine family.

SWISS: 043768

Gene ID: 2029

Database links:

Entrez Gene: 281142 Cow

Entrez Gene: 2029 Human

Entrez Gene: 56205 Mouse

Entrez Gene: 60334 Rat
<u>Omim: 603061</u> Human
SwissProt: O43768 Human
SwissProt: P60840 Mouse
SwissProt: P60841 Rat
Unigene: 632456 Human
Unigene: 27154 Rat
Important Note:
This product as supplied is intended for research use only, not for use in human,
therapeutic or diagnostic applications.

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