abcam

ab180513

Anti-ENSA antibody [EPR8008(2)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR8008(2)
Purification technique	Affinity purification Protein A
Specificity	ENSA (O43768) and ARPP-19 (P56211)
Concentration	0.345 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse
Dilution info	1/1000 - 1/10000
Notes	-

Species	Rat
Dilution info	1/1000 - 1/10000
Notes	-

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/70
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information Alpha-endosulfine

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.

Storage

Shipped at conditions Conditional Ambient

Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	ENSA also known as alpha-endosulfine is a protein with a mass of approximately 13 kDa. ENSA is part of the endosulfine family and finds expression in various tissues including the brain and pancreas. This protein primarily acts as an endogenous ligand for sulfonylurea receptor and has a role in regulating potassium channels. Its structural and functional characteristics highlight its importance in cellular activities.
Biological function summary	ENSA functions as a modulator of protein phosphatase 2A (PP2A) a critical enzyme in controlling cell growth and division. ENSA by inhibiting the catalytic activity of PP2A influences key regulatory mechanisms in cells. It also interacts with ARPP-19 a protein that enhances its inhibitory action contributing to the regulation of cellular processes such as mitosis and signal transduction.
Pathways	ENSA plays a significant role in the mTOR signaling pathway a major regulator of cell growth metabolism and survival. In this pathway ENSA interacts with various proteins including the mTOR itself to modulate the phosphorylation state of downstream targets affecting cellular responses to nutrient availability.

	Additionally ENSA is involved in the regulation of glucose metabolism through its interaction in the AMPK signaling pathway contributing to energy homeostasis in cells.
Associated diseases and disorders	ENSA demonstrates a connection to metabolic disorders such as type 2 diabetes by modulating insulin secretion and action. ENSA impacts the glucose regulatory processes through its association with proteins like the sulfonylurea receptor important in insulin release from pancreatic beta cells. Moreover ENSA's involvement in the dysregulation of cell growth pathways relates to certain cancers indicating its potential role in tumorigenesis through its interaction with PP2A and associated signaling components.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

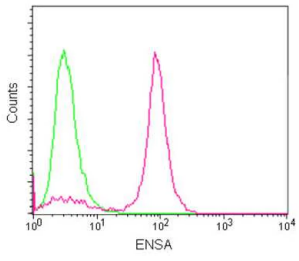
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

3 product images

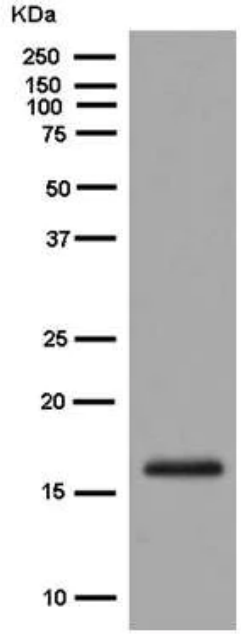


Flow Cytometry (Intracellular) - Anti-ENSA antibody [EPR8008(2)] (ab180513)

ENSA Flow Cytometry (Intracellular) staining using rabbit Anti-ENSA antibody

Intracellular flow cytometric analysis of K562 cells labeling ENSAwith ab180513 at 1/70 dilution. Goat anti rabbit IgG (FITC) at 1/75 dilution was used as the secondary antibody. Cells were fixed in

2% paraformaldehyde.



Western blot - Anti-ENSA antibody [EPR8008(2)] (ab180513)

ENSA Western blot staining of HeLa cell lysate using rabbit Anti-ENSA antibody

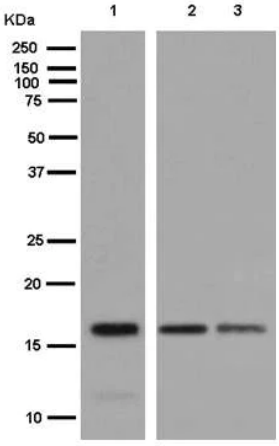
Blocking/diuting buffer buffer 5% NFDM/TBST
All lanes:
Western blot - Anti-ENSA antibody [EPR8008(2)] (ab180513) at 1/2000 dilution

All lanes:
HeLa cell lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated Secondary antibody at 1/1000 dilution

Predicted band size: 13 kDa



Western blot - Anti-ENSA antibody [EPR8008(2)] (ab180513)

Blocking/dilutin buffer 5% NFDM/TBST
All lanes:
Western blot - Anti-ENSA antibody [EPR8008(2)] (ab180513) at 1/10000 dilution

Lane 1:
Fetal brain lysate at 10 µg

Lane 2:
Rat heart lysate at 10 µg

Lane 3:
Mouse heart lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated secondary antibody at 1/1000 dilution

Predicted band size: 13 kDa

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