

# **MBOAT4** Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12316c

### Specification

# **MBOAT4 Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB, IHC-P,E <u>O96T53</u> <u>NP\_001094386.1</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 258-287

## **MBOAT4** Antibody (Center) - Additional Information

Gene ID 619373

**Other Names** Ghrelin O-acyltransferase, 231-, Membrane-bound O-acyltransferase domain-containing protein 4, O-acyltransferase domain-containing protein 4, MBOAT4, GOAT, OACT4

### Target/Specificity

This MBOAT4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 258-287 amino acids from the Central region of human MBOAT4.

**Dilution** WB~~1:1000 IHC-P~~1:10~50

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**

MBOAT4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **MBOAT4 Antibody (Center) - Protein Information**

Name MBOAT4 (HGNC:32311)

Synonyms GOAT, OACT4



**Function** Catalyzes ghrelin acylation at 'Ser-3' using preferentially octanoyl-CoA, hexanoyl-CoA and decanoyl-CoA as acyl-CoA donors leading to ghrelin activity (PubMed:<u>24045953</u>, PubMed:<u>18443287</u>, PubMed:<u>25562443</u>, PubMed:<u>28134508</u>). In vitro uses also acyl-CoA donors of different lengths from short-chain (C2) to long-chain fatty acids (C16) knowing that acyl-CoA donors from butanoyl-CoA (C4) to dodecanoyl-CoA (C12) are more efficient compared to longer acyl-CoA donors, such as myristoyl- CoA (C14) and palmitoyl-CoA (C16) that are not efficient (PubMed:<u>18443287</u>).

### **Cellular Location**

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P0C7A3}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P0C7A3}

### **Tissue Location**

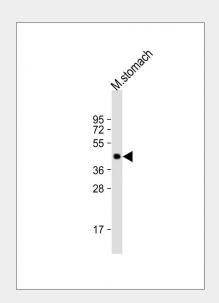
Expressed predominantly in stomach with moderate levels in pancreas and relatively low levels in most other tissues

# **MBOAT4 Antibody (Center) - Protocols**

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

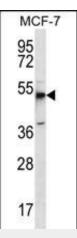
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## MBOAT4 Antibody (Center) - Images

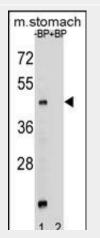


Anti-MBOAT4 Antibody (Center) at 1:2000 dilution + mouse stomach lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

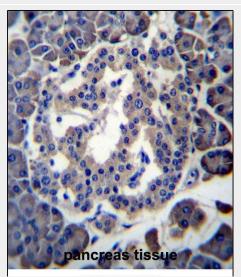




MBOAT4 Antibody (Center) (Cat. #AP12316c) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the MBOAT4 antibody detected the MBOAT4 protein (arrow).



Western blot analysis of MBOAT4 Antibody (Center) Pab (Cat. #AP12316c) pre-incubated without(lane 1) and with(lane 2) blocking peptide in mouse stomach tissue lysate. MBOAT4 (arrow) was detected using the purified Pab.



MBOAT4 Antibody (Center) (Cat. #AP12316c)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of MBOAT4 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



# MBOAT4 Antibody (Center) - Background

MBOAT4 mediates the octanoylation of ghrelin at 'Ser-3'. Can use a variety of fatty acids as substrates including octanoic acid, decanoic acid and tetradecanoic acid.

## **MBOAT4 Antibody (Center) - References**

Takahashi, T., et al. J. Biochem. 146(5):675-682(2009) Gomez, R., et al. Arthritis Rheum. 60(6):1704-1709(2009) Gutierrez, J.A., et al. Proc. Natl. Acad. Sci. U.S.A. 105(17):6320-6325(2008)