

MBOAT4 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12316c**Specification**

MBOAT4 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	O96T53
Other Accession	NP_001094386.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	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~~1:2000

IHC-P~~1:10~50

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

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:[18443287](#), PubMed:[24045953](#), PubMed:[25562443](#), PubMed:[28134508](#)). In vitro also uses 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:[18443287](#)).

Cellular Location

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

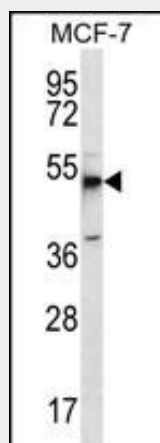
Tissue Location

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

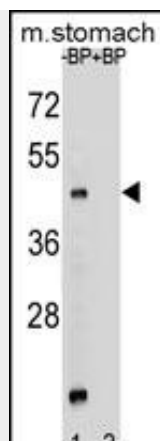
MBOAT4 Antibody (Center) - Protocols

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

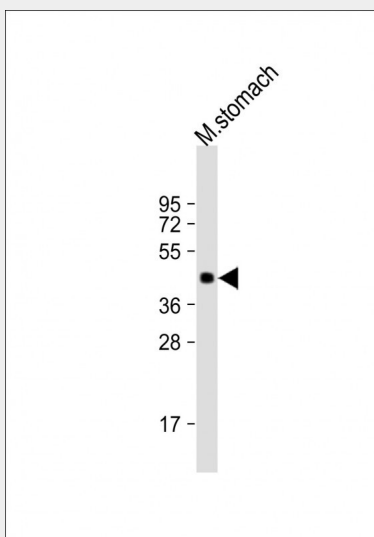
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MBOAT4 Antibody (Center) - Images

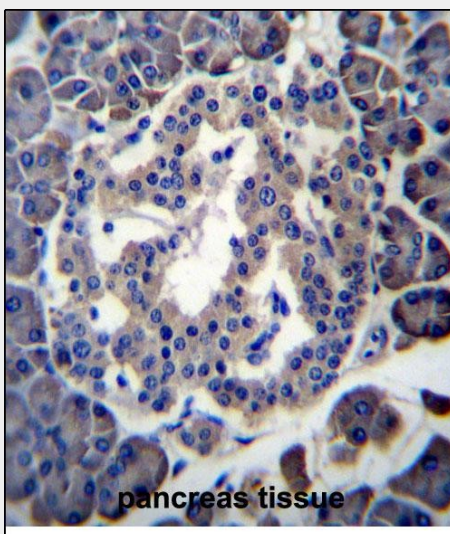
MBOAT4 Antibody (Center) (Cat. #AP12316c) western blot analysis in MCF-7 cell line lysates (35ug/lane). This demonstrates the MBOAT4 antibody detected the MBOAT4 protein (arrow).



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.



Anti-MBOAT4 Antibody (Center) at 1:2000 dilution + mouse stomach lysate Lysates/proteins at 20 µg 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) 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)