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MBOAT4 Rabbit pAb

Catalog # AP99269

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q96T53
Other Accession	Q96T53
Reactivity	Rat, Mouse
Predicted	Gorilla, Human, Rabbit, Monkey, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49716
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Ghrelin O acyltransferase
Epitope Specificity	101-200/435
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 membrane-bound acyltransferase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	MBOAT4 (membrane-bound O-acyltransferase domain-containing protein 4, Ghrelin O-acyltransferase) is a 435 amino acid, multi-pass membrane protein that belongs to the membrane-bound acyltransferase family. MBOAT4 functions as an enzyme that attaches an octanoate fatty acid to serine-3 of ghrelin. Ghrelin is a very small, appetite-stimulating hormone secreted by the food-deprived stomach. MBOAT4 can use a variety of fatty acids as substrates including octanoic acid, decanoic acid and tetradecanoic acid. MBOAT4 expression, consistent with its function, is mainly in the stomach and intestines. Due to its primary function, MBOAT4 is a candidate for obesity and appetite suppression studies.

Additional Information

Gene ID	619373
Other Names	FKSG89; GOAT; OACT4; Gm171; MBOA4_HUMAN; MBOAT4; Membrane-bound O-acyltransferase domain-containing protein 4 (O-acyltransferase domain-containing protein 4); 2.3.1.-; MBOA4_MOUSE; membrane bound ghrelin O-acyltransferase MBOAT4; membrane bound O-acyltransferase domain containing 4; O-acyltransferase (membrane bound) domain containing 4; ghrelin O-acyltransferase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	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

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