

# ORMDL3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP10739c

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q8N138</a>
<b>Other Accession</b>	<a href="#">Q6QI25</a> , <a href="#">Q9CPZ6</a> , <a href="#">Q5XJR6</a> , <a href="#">Q0VD15</a> , <a href="#">Q9CQZ0</a> , <a href="#">Q53FV1</a> , <a href="#">Q5E972</a> , <a href="#">Q5XH57</a> , <a href="#">Q9P0S3</a> , <a href="#">Q8JFB7</a> , <a href="#">Q29RQ9</a> , <a href="#">NP_644809.1</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Predicted</b>	Rat, Zebrafish, Bovine, Xenopus
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Calculated MW</b>	17495
<b>Antigen Region</b>	53-81

## Additional Information

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<b>Gene ID</b>	94103
<b>Other Names</b>	ORM1-like protein 3, ORMDL3
<b>Target/Specificity</b>	This ORMDL3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 53-81 amino acids from the Central region of human ORMDL3.
<b>Dilution</b>	WB~~1:2000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	ORMDL3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ORMDL3
<b>Function</b>	Plays an essential role in the homeostatic regulation of sphingolipid de novo biosynthesis by modulating the activity of the serine palmitoyltransferase (SPT) in response to ceramide levels (PubMed: <a href="#">20182505</a> , PubMed: <a href="#">30700557</a> ,

PubMed:[37308477](#)). When complexed to SPT, the binding of ceramides to its N-terminus stabilizes a conformation that block SPT substrate entry, hence preventing SPT catalytic activity. Through this mechanism, maintains ceramide levels at sufficient concentrations for the production of complex sphingolipids, but which prevents the accumulation of ceramides to levels that trigger apoptosis (PubMed:[37308477](#)).

#### Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

#### Tissue Location

Widely expressed. Expressed in adult and fetal heart, brain, lung, liver, skeletal muscle and kidney. Expressed in adult pancreas and placenta and in fetal spleen and thymus

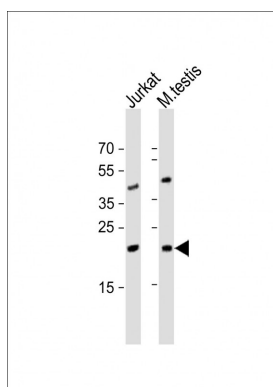
## Background

Negative regulator of sphingolipid synthesis. May indirectly regulate endoplasmic reticulum-mediated Ca(+2) signaling.

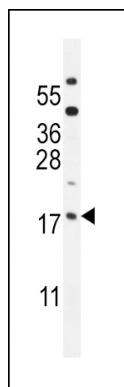
## References

Fransen, K., et al. Hum. Mol. Genet. 19(17):3482-3488(2010) Liu, X., et al. Nat. Genet. 42(8):658-660(2010) Halapi, E., et al. Eur. J. Hum. Genet. 18(8):902-908(2010) Dobbins, S.E., et al. Int. J. Cancer (2010) In press : McGovern, D.P., et al. Nat. Genet. 42(4):332-337(2010)

## Images



All lanes : Anti-ORMDL3 Antibody (Center) at 1:1000 dilution Lane 1: Jurkat whole cell lysate Lane 2: mouse testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



ORMDL3 Antibody (Center) (Cat. #AP10739c) western blot analysis in mouse testis tissue lysates (35ug/lane). This demonstrates the ORMDL3 antibody detected the ORMDL3 protein (arrow).

## Citations

- [ORMDL3 regulates poly I:C induced inflammatory responses in airway epithelial cells](#)

- [The ORMDL3 Asthma Gene Regulates ICAM1 and has Multiple Effects on Cellular Inflammation.](#)
- [Staurosporines decrease ORMDL proteins and enhance sphingomyelin synthesis resulting in depletion of plasmalemmal phosphatidylserine.](#)
- [ORMDL proteins regulate ceramide levels during sterile inflammation.](#)
- [ORMDL3 modulates store-operated calcium entry and lymphocyte activation.](#)
- [ORMDL3 is an inducible lung epithelial gene regulating metalloproteases, chemokines, OAS, and ATF6.](#)

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