

ORMDL3 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP10739c

Specification

ORMDL3 Antibody (Center) Blocking peptide - Product Information

Primary Accession

08N138

ORMDL3 Antibody (Center) Blocking peptide - Additional Information

Gene ID 94103

Other Names

ORM1-like protein 3, ORMDL3

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ORMDL3 Antibody (Center) Blocking peptide - Protein Information

Name ORMDL3

Function

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:20182505, PubMed:30700557, 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



ORMDL3 Antibody (Center) Blocking peptide - Protocols

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

• Blocking Peptides

ORMDL3 Antibody (Center) Blocking peptide - Images

ORMDL3 Antibody (Center) Blocking peptide - Background

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

ORMDL3 Antibody (Center) Blocking peptide - 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)