

MFSD2A Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS14002**Specification****MFSD2A Antibody (C-Terminus) - Product Information**

Application	IF, WB, IHC
Primary Accession	Q8NA29
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60kDa kDa

MFSD2A Antibody (C-Terminus) - Additional Information**Gene ID** 84879**Other Names**

Sodium-dependent lysophosphatidylcholine symporter 1, NLS1, Sodium-dependent LPC symporter 1, Major facilitator superfamily domain-containing protein 2A, MFSD2A, MFSD2, NLS1

Target/Specificity

Human MFSD2A

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

MFSD2A Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

MFSD2A Antibody (C-Terminus) - Protein Information**Name** MFSD2A {ECO:0000303|PubMed:18694395, ECO:0000312|HGNC:HGNC:25897}**Function**

Sodium-dependent lysophosphatidylcholine (LPC) symporter, which plays an essential role for blood-brain barrier formation and function (PubMed: [24828040](http://www.uniprot.org/citations/24828040), PubMed: [34135507](http://www.uniprot.org/citations/34135507), PubMed: [32572202](http://www.uniprot.org/citations/32572202)). Specifically expressed in endothelium of the blood-brain barrier of micro-vessels and transports LPC into the brain (By similarity). Transport of LPC is essential because it constitutes the major mechanism by which docosahexaenoic acid (DHA), an omega-3 fatty acid that is essential for normal brain growth and cognitive function, enters the brain (PubMed: [34135507](http://www.uniprot.org/citations/34135507), PubMed: [26005868](http://www.uniprot.org/citations/26005868)). Transports LPC carrying long-chain fatty acids such LPC oleate and LPC palmitate with a minimum acyl chain

length of 14 carbons (By similarity). Does not transport docosahexaenoic acid in unesterified fatty acid (By similarity). Specifically required for blood-brain barrier formation and function, probably by mediating lipid transport (By similarity). Not required for central nervous system vascular morphogenesis (By similarity). Acts as a transporter for tunicamycin, an inhibitor of asparagine-linked glycosylation (PubMed:21677192). In placenta, acts as a receptor for ERVFRD-1/syncytin-2 and is required for trophoblast fusion (PubMed:18988732, PubMed:23177091).

Cellular Location

Cell membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9DA75}; Multi-pass membrane protein. Note=Cytoplasmic punctae that may represent vesicles shuttling between the endoplasmic reticulum and the plasma membrane (PubMed:21677192).

Tissue Location

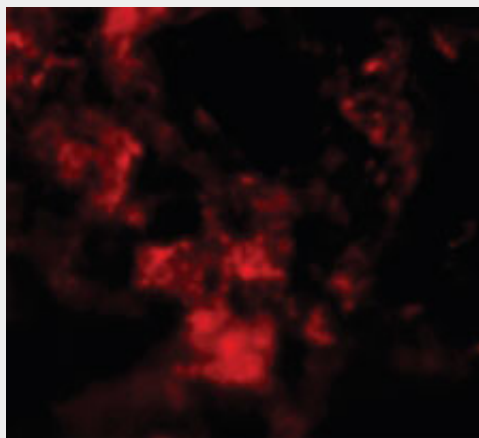
In placenta, associated with trophoblast cells.

MFSD2A Antibody (C-Terminus) - Protocols

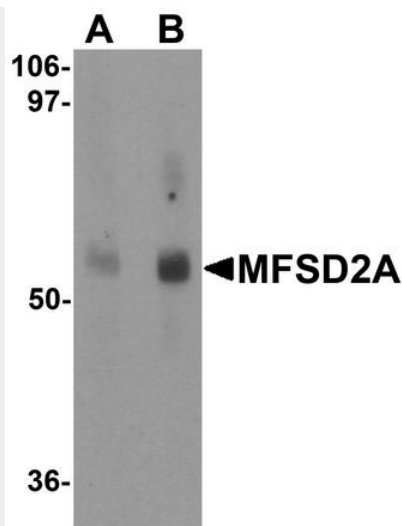
Provided below are standard protocols that you may find useful for product applications.

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

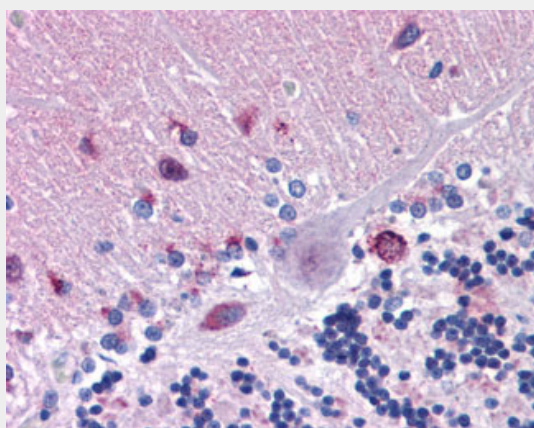
MFSD2A Antibody (C-Terminus) - Images



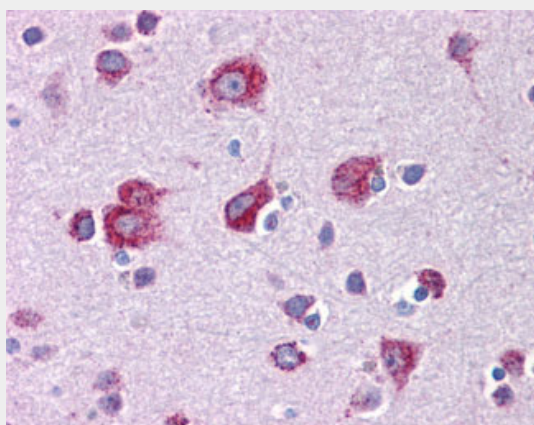
Immunofluorescence of MFSD2A in Rat Lung cells with MFSD2A antibody at 20 ug/ml.



Western blot analysis of MFSD2A in rat lung tissue lysate with MFSD2A antibody at (A) 1 and (B)...



Anti-MFSD2A antibody IHC of human brain, cerebellum.



Anti-MFSD2A antibody IHC of human brain, cortex.

MFSD2A Antibody (C-Terminus) - Background

Sodium-dependent lysophosphatidylcholine (LPC) symporter, which plays an essential role for blood-brain barrier formation and function. Specifically expressed in endothelium of the blood-brain barrier of micro-vessels and transports LPC into the brain. Transport of LPC is essential because it constitutes the major mechanism by which docosahexaenoic acid (DHA), an omega-3 fatty acid that is essential for normal brain growth and cognitive function, enters the brain. Transports LPC

carrying long-chain fatty acids such LPC oleate and LPC palmitate with a minimum acyl chain length of 14 carbons. Does not transport docosahexaenoic acid in unesterified fatty acid. Specifically required for blood-brain barrier formation and function, probably by mediating lipid transport. Not required for central nervous system vascular morphogenesis (By similarity). Acts as a transporter for tunicamycin, an inhibitor of asparagine-linked glycosylation. In placenta, acts as a receptor for ERVFRD- 1/syncytin-2 and is required for trophoblast fusion (PubMed:18988732).

MFSD2A Antibody (C-Terminus) - References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
Yamada S.,et al.Oncogene 23:5901-5911(2004).
Wan D.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:15724-15729(2004).
Otsuki T.,et al.DNA Res. 12:117-126(2005).