

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

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**MFSD2A Antibody (C-Terminus) - Product Information**

Application	IF, WB, IHC
Primary Accession	<a href="#">Q8NA29</a>
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: [32572202](http://www.uniprot.org/citations/32572202), PubMed: [34135507](http://www.uniprot.org/citations/34135507)). 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: [26005868](http://www.uniprot.org/citations/26005868), PubMed: [34135507](http://www.uniprot.org/citations/34135507)). 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 docosaehaenoic 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:<a href="http://www.uniprot.org/citations/21677192" target="\_blank">21677192</a>). In placenta, acts as a receptor for ERVFRD-1/syncytin-2 and is required for trophoblast fusion (PubMed:<a href="http://www.uniprot.org/citations/18988732" target="\_blank">18988732</a>, PubMed:<a href="http://www.uniprot.org/citations/23177091" target="\_blank">23177091</a>).

#### 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

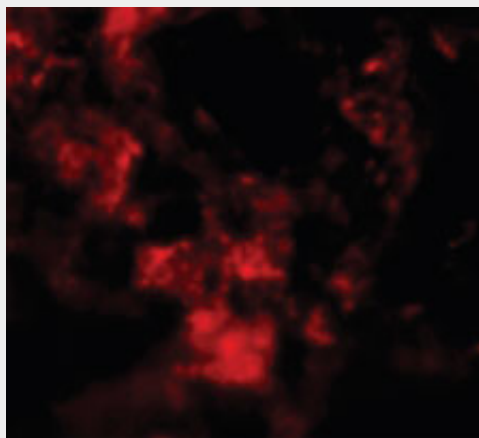
In placenta, associated with trophoblast cells.

### MFSD2A Antibody (C-Terminus) - Protocols

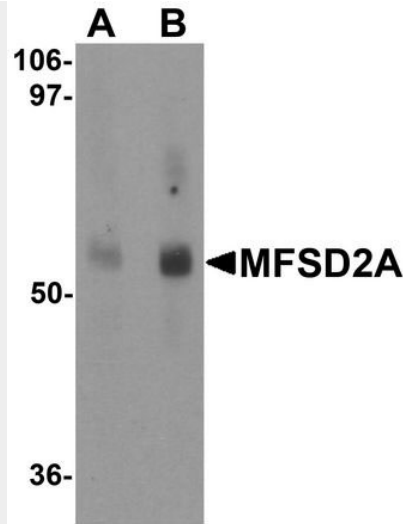
Provided below are standard protocols that you may find useful for product applications.

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

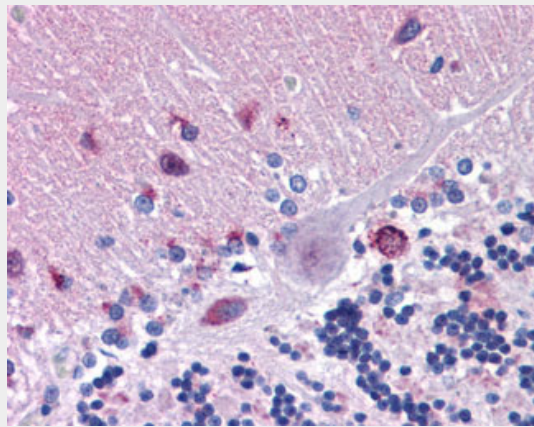
### MFSD2A Antibody (C-Terminus) - Images



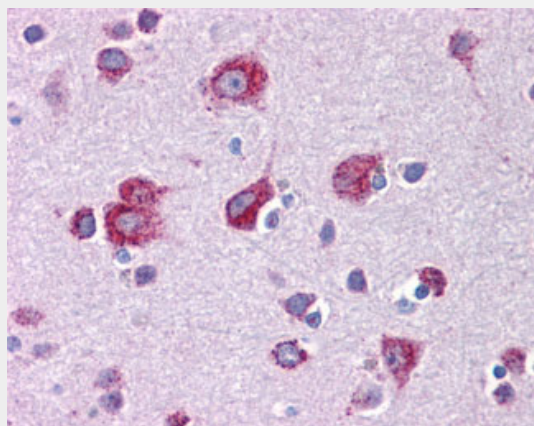
Immunofluorescence of MFSD2A in Rat Lung cells with MFSD2A antibody at 20 ug/ml.



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

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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**

- Clark H.F.,et al.Genome Res. 13:2265-2270(2003).  
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).