

MFSD2A Rabbit pAb
Rabbit Polyclonal Antibody
Catalog # AP93287**Specification**

MFSD2A Rabbit pAb - Product Information

Application	IHC, WB, FC
Primary Accession	Q8NA29
Reactivity	Human, Mouse, Rat
Predicted	Rabbit, Pig, Chicken
Host	Rabbit
Clonality	Polyclonal
Calculated MW	60 kDa

MFSD2A Rabbit pAb - Additional Information**Gene ID** 84879**Other Names**

Major facilitator superfamily domain containing 2; Major facilitator superfamily domain containing 2A; Major facilitator superfamily domain-containing protein 2A; MFS2A_HUMAN; MFSD2; MFSD2A.

Target/Specificity

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Dilution

IHC~~1:100-500<br \>WB~~1:500-2000<br \>FC~~0.2ug/test

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

MFSD2A Rabbit pAb - 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, PubMed:32572202, PubMed: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, PubMed: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 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

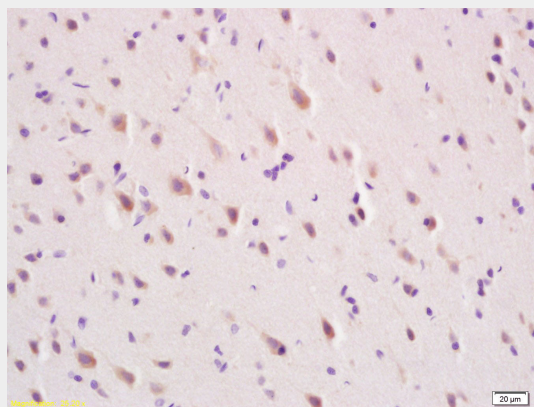
In placenta, associated with trophoblast cells.

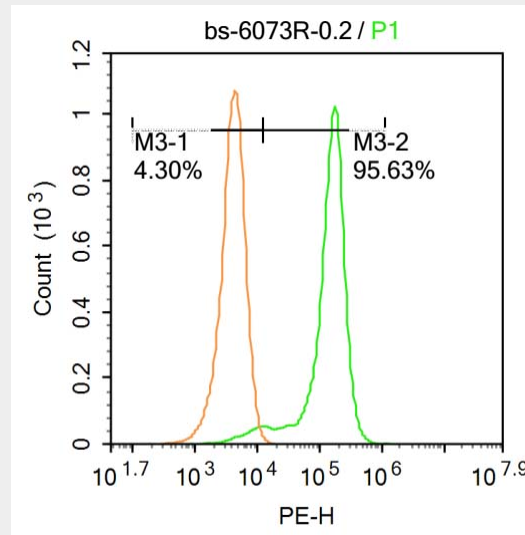
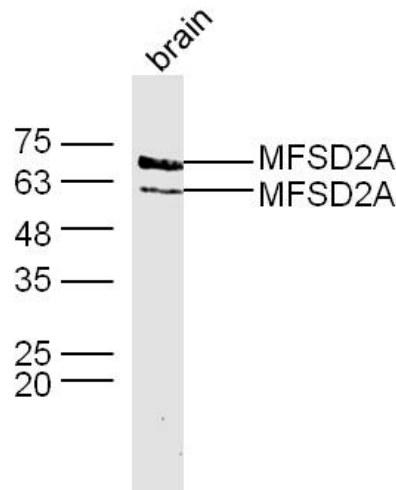
MFSD2A Rabbit pAb - Protocols

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 Rabbit pAb - Images





MFSD2A Rabbit pAb - Background

MFSD2 is a 543 amino acid multi-pass membrane protein of the endoplasmic reticulum that is involved in beta-adrenergic signaling during thermogenesis. Existing as three alternatively spliced isoforms, MFSD2 plays a role in G1 regulation and is encoded by a gene that maps to human chromosome 1p34.2. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.