10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 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 ℃ 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 ℃.

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).

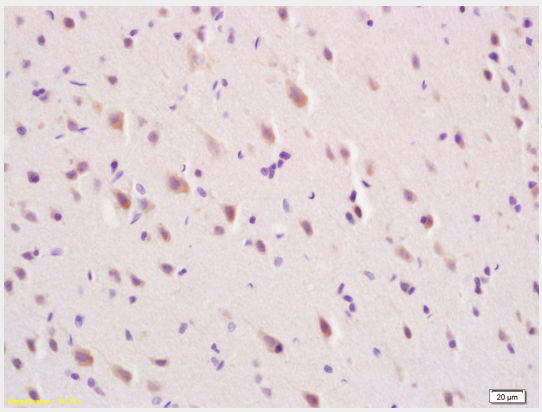
Tissue Location
In placenta, associated with trophoblast cells.

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 Cytomety
- Cell Culture

MFSD2A Rabbit pAb - Images



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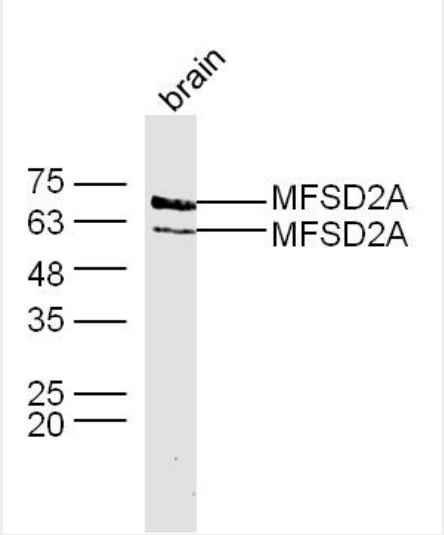

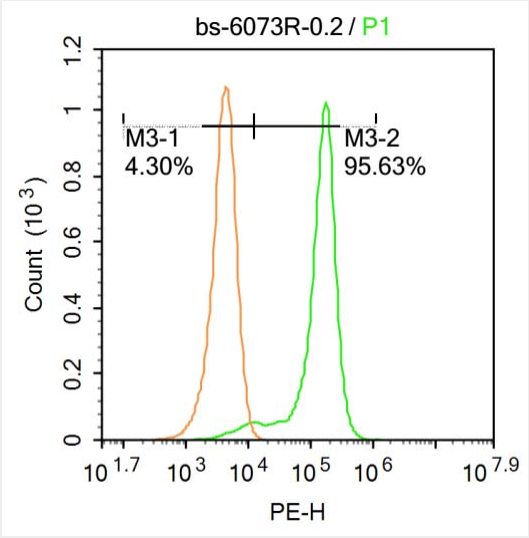

MFSD2A Rabbit pAb - Background

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.