

MFSD1 Antibody
Catalog # ASC11223**Specification**

MFSD1 Antibody - Product Information

Application	WB, IHC-P, E
Primary Accession	Q9H3U5
Other Accession	NP_073573 , 269847416
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	MFSD1 antibody can be used for detection of MFSD1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL.

MFSD1 Antibody - Additional Information

Gene ID	64747
Target/Specificity	
MFSD1;	

Reconstitution & Storage

MFSD1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

MFSD1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MFSD1 Antibody - Protein Information

Name MFSD1 ([HGNC:25874](#))

Function

Lysosomal dipeptide uniporter that selectively exports lysine, arginine or histidine-containing dipeptides with a net positive charge from the lysosome lumen into the cytosol (PubMed:<[a href="http://www.uniprot.org/citations/38507452" target="_blank">38507452](http://www.uniprot.org/citations/38507452)). Could play a role in a specific type of protein O-glycosylation indirectly regulating macrophages migration and tissue invasion (PubMed:<[a href="http://www.uniprot.org/citations/30910009" target="_blank">30910009](http://www.uniprot.org/citations/30910009)). Also essential for liver homeostasis (By similarity).

Cellular Location

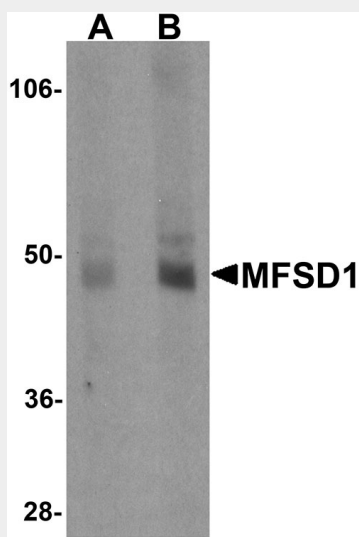
Lysosome membrane; Multi-pass membrane protein. Note=Also detected in Golgi when overexpressed.

MFSD1 Antibody - Protocols

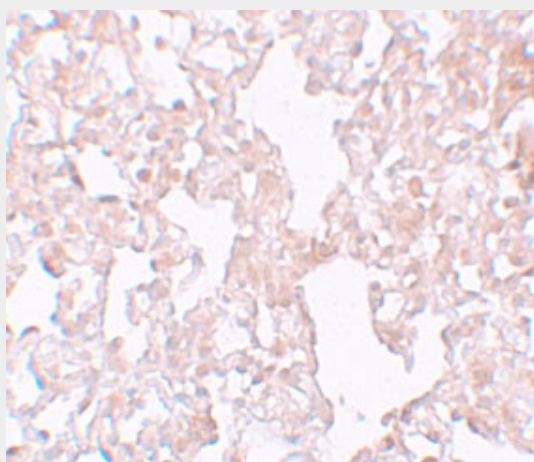
Provided below are standard protocols that you may find useful for product applications.

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

MFSD1 Antibody - Images



Western blot analysis of MFSD1 in human lung tissue lysate with MFSD1 antibody at (A) 1 and (B) 2 μ g/mL.



Immunohistochemistry of MFSD1 in rat lung tissue with MFSD1 antibody at 10 μ g/mL.

MFSD1 Antibody - Background

MFSD1 Antibody: Multidrug transporters, such as MFSD1, are membrane proteins that expel a wide

spectrum of cytotoxic compounds from the cell and render cells resistant to multiple drugs. The Major Facilitator Superfamily (MFS) is a large and diverse group of secondary transporters that include uniporters, symporters, and antiporters. Members of this family are found in all living organisms and are highly represented in bacteria. MFS members are capable of transporting various substrates such as sugars, polyols, drugs, neurotransmitters, amino acids, peptides, and inorganic anions, although most members are substrate-specific. MFS have provided important insight into the mechanism underlying multidrug transport. MFSD1 is still poorly understood.

MFSD1 Antibody - References

Fluman N and Bibi E. Bacterial multidrug transport through the lens of the major facilitator superfamily. *Biochim. Biophys. Acta.*2009; 1794:738-47.

Law CJ, Maloney PC, and Wang DN. Ins and outs of major facilitator superfamily antiporters. *Annu. Rev. Microbiol.*2008; 62:289-305.

Saidijam M, Benedetti G, Ren Q, et al. Microbial drug efflux proteins of the major facilitator superfamily. *Curr. Drug Targets*2006; 7:793-811.