

## Product datasheet for **RC238537**

### **MFSD2A (NM\_001287809) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MFSD2A (NM_001287809) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MFSD2A
Synonyms:	MCPH15; MFSD2; NEDMISBA; NLS1; SLC59A1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC238537 representing NM\_001287809  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCAAAGGAGAAGGCGCCGAGAGCGGCTCCGCGGCGGGCTGCTACCCACCAGCATCTCCAAGCA  
 CTGAACGCCCGGCCAGGTGAAGATCTACCTATTGGATGTGGCTCAGGTGGGCCCTTCTCTGCCTCCAT  
 CATCTGTTTGTGGGCCGAGCCTGGGATGCCATCACAGACCCCTGGTGGCCTCTGCATCAGCAATCC  
 CCCTGGACCTGCCTGGTGCCTTATGCCTGGATCATCTTCTCCAGCCCTGGCCGTCATTGCCTACT  
 TCCTCATCTGGTTCGTGCCGACTTCCACACGGCCAGACCTATTGGTACCTGCTTTTCTATTGCCTCTT  
 TGAACAATGGTCACGTGTTCCATGTTCCCTACTCGGCTCTCACCATGTTTCATCAGCACCGGAGCAGACT  
 GAGCGGGATTCTGCCACCGCCTATCGGATGACTGTGGAAGTGTGGGCACAGTGTGGGCACGGCGATCC  
 AGGGACAAATCGTGGCCAAGCAGACACGCCTGTTTCCAGGACCTCAATAGCTCTACAGTAGCTTACACA  
 AAGTGCCAACCATACACATGGCACCACCTCACACAGGAAACGGCATACTGCTGGCAGCGGGGTCATT  
 GTCTGTATCTATAATCTGTGCTGTATCCTGATCCTGGGCGTGCAGGAGCAGAGAGAACCCTATGAAG  
 CCCAGCAGTCTGAGCCAATCGCCTACTTCCGGGCGCTACGGCTGGTTCATGAGCCACGGCCATACATCAA  
 ACTTATTACTGGCTTCTCTTACCTCCTTGGCTTTCATGCTGGTGGAGGGGAACTTGTCTTGTGTTTGC  
 ACCTACACCTTGGGCTTCCGCAATGAATCCAGAATCTACTCCTGGCCATCATGCTCTCGGCCACTTTAA  
 CCATCCCCTCTGGCAGTGGTCTTGGACCGGTTTGGCAAGAAGACAGCTGTATATGTTGGGATCTCATC  
 AGCAGTGCATTTCTCATCTTGGTGGCCCTCATGGAGAGTAACCTCATCATTACATATGCCGTAGCTGTG  
 GCAGCTGGCATCAGTGTGGCAGCTGCCTTCTTACTACCCTGGTCCATGCTGCCTGATGTCATTGACGAT  
 TCCATCTGAAGCAGCCCCACTTCCATGGAACCGAGCCCATCTTCTCTCTCTTCTATGCTCTTCCACAA  
 GTTTGCCTCTGGAGTGTCACTGGCATTCTACCCTCAGTCTGGACTTTGCAGGGTACCAGACCCGTGGC  
 TGCTCGCAGCCGGAACGTGTCAAGTTTACACTGAACATGCTCGTGACCATGGCTCCCATAGTTCTCATCC  
 TGCTGGGCTGCTGCTCTTCAAATGTACCCATTGATGAGGAGAGGCGCGGCAGAATAAGAAGGCCCT  
 GCAGGCACTGAGGGACGAGGCCAGCAGCTCTGGCTGCTCAGAAACAGACTCCACAGAGCTGGCTAGCATC  
 CTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238537 representing NM\_001287809  
 Red=Cloning site Green=Tags(s)

MAKGEAESGSAAGLLPTSILQSTERPAQVKIYLLDVAQVGPFSASIIILFVGRAWDAITDPLVGLCISKS  
 PWTCLGRLMPWIIIFSTPLAVIAYFLIWFVPDFPHGQTYWYLLFYCLFETMVTCFHVPYSALTMFISTEQT  
 ERDSATAYRMTVEVLGTVLGTAIQGGQIVGQADTPCFQDLNSSTVASQSANHTHTTSHRETAYLLAAGVI  
 VCIYIICAVILILGVREQREPYEAAQSEPIAYFRGLRLVMSHGPIYIKLITGFLFTSLAFMLVEGNFVLC  
 TYTLGFRNEFQNLALLAIMLSATLTIPIWQWFLTRFGKKTAVYVGISSAVPFLILVALMESNLIITYAVAV  
 AAGISVAAAFLLPWSMLPDVIDDFHLKQPHFHGTEPIFFSFYVFFTKFASGVSLGISTLSLDFAGYQTRG  
 CSQPERVKFTLNMLVTMAPIVLILLGLLLFKMYPIDEERRQNKKALQALRDEASSSGCSETDSTELASI  
 L

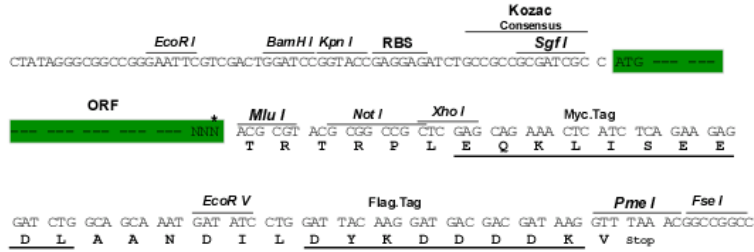
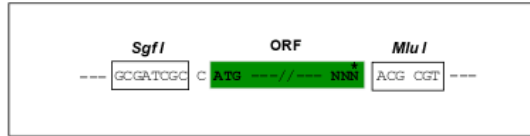
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

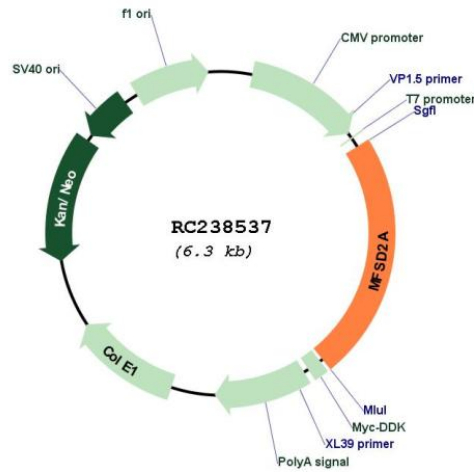
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_001287809

**ORF Size:** 1473 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_001287809.2](#)

**RefSeq Size:** 2075 bp

**RefSeq ORF:** 1476 bp

**Locus ID:** 84879

**UniProt ID:** [Q8NA29](#)

**Cytogenetics:** 1p34.2

**Protein Families:** Transmembrane

**MW:** 54.8 kDa

**Gene Summary:** The protein encoded by this gene is a transmembrane protein and sodium-dependent lysophosphatidylcholine transporter. The encoded protein is involved in the establishment of the blood-brain barrier and is required for brain growth and function. Defects in this gene are a cause of a progressive microcephaly syndrome. [provided by RefSeq, Mar 2017]