

Product datasheet for **MC214637**

Fa2h (NM_178086) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Fa2h (NM_178086) Mouse Untagged Clone
Tag: Tag Free
Symbol: Fa2h
Synonyms: FAAH; Faxdc1; G630055L08Rik
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC214637 representing NM_178086
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCCCGCTCCGCCCCCGCCGCTCTTTACGCCCCGCGAGGTCCAGCGGCGCCTGGCGGCCGGTG
CCTGCTGGGTCCGCCCGGGGCCAGCCTCTACGACCTACCAGCTTCGTGCGGCATCATCCGGGGGCGA
GCAGCTGCTGCTGGCGCGGGCTGGCCAGGACATCAGTCCGACCTGGATGGCCACCTCACAGACTCC
GACAACGCCCGCGCTGGCTGGAGCAGTACTATGTGGCGAACTGCGAGCGGACCCGAGGATCCCACAG
AGAATGGTGTGTAGCCTCTGCAGAGACTCAGAAGACAGACCCTGCTCTTGAGCCACAGTTCAAAGTGGT
GGACTGGGACAAGGACCTGGTGGACTGGCAGAAACCTCTGCTGTGGCAGGTGGCCACTTGGGGGAGAAG
TATGATGAGTGGGTTACCAACCAGTGGCCAGGCCATTTCGCCTCTTCCACTCAGACCTCATCGAGGCC
TCTCCAAGACTGTCTGGTATAGTGTCCCATCATCTGGGTGCCCTGGTGTGTACCTCAGCTGGTCCTA
CTACCGAACCTCACCCAGGACAACATCCGGCTCTTCGCATCACTACAAGAGAGTATTCATGATGATG
CCGGAGTCGGTTCATAGGCCCTTTGTGCTGGCATGCTTTTTGGACCTTTGTGGAATACGTCATCC
ACCGCTTCCTGTTCCATATGAAGCCCCCAGCAACAGCCATTACCTCATCATGTTGCATTTTGTGCATGCA
CGGCCAGCACCACAAGGCACCGTTTGTGGCTCCCGTCTGGTCTTCCCCCAGTGCCAGCCTCCCTAGTG
ATTGCCTTCTTCTATGTGTTCTGCGGCTCATTCTGCCTGAGACCGTGGGAGGCATCATCTTTGCTGGGG
GTCTCCTGGGCTATGTCTCTATGACATGACACATTACTACCTGCACTTCGGCTCTCCACACAAGGGCTC
CTACCTGTACAACATGAAGGCCACCATGTCAAGCATCACTTCGAATACCAGAAATCAGGGTTTGGCATC
AGCACTAAACTGTGGATTACTTTTTCCACACCCTCATTCCAGAGGAAGCCACCCGAAGATGCAG**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_178086



Insert Size:	1119 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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:	<u>NM_178086.3, NP_835187.2</u>
RefSeq Size:	2492 bp
RefSeq ORF:	1119 bp
Locus ID:	338521
UniProt ID:	<u>Q5MPP0</u>
Cytogenetics:	8 E1
Gene Summary:	Catalyzes stereospecific hydroxylation of free fatty acids at the C-2 position to produce (R)-2-hydroxy fatty acids, which are building blocks of sphingolipids and glycosphingolipids common in neural tissue and epidermis (PubMed:15658937, PubMed:16998236). Plays an essential role in the synthesis of galactosphingolipids of the myelin sheath (PubMed:15658937, PubMed:18815260). Responsible for the synthesis of sphingolipids and glycosphingolipids involved in the formation of epidermal lamellar bodies, critical for skin permeability barrier (By similarity). Participates in the synthesis of glycosphingolipids and a fraction of type II wax diesters in sebaceous gland, specifically regulating hair follicle homeostasis (PubMed:21628453). Involved in the synthesis of sphingolipids of plasma membrane rafts, controlling lipid raft mobility and trafficking of raft-associated proteins (PubMed:22517924).[UniProtKB/Swiss-Prot Function]