

Product datasheet for **MG219385**

Awat2 (NM_177746) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Awat2 (NM_177746) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Awat2
Synonyms: 9430062J17Rik; ARAT; Dgat2l4; WS
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG219385 representing NM_177746
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTTCTGGCCACCAAGAAGGACCTCAAGACCGCCATGGAGGTCTTTGCTCTTTCCAGTGGGCCCTCA
 GTGCCTTGGTTATAGTACCACCTGTGATCATTGTCAACCTCTACTTGGTGGTGTTCACATCTTACTGGCC
 TGTACCCTGTTGATGCTCACCTGGCTGGCTTTGACTGGAAGACCCCTGAGCGAGGTGGCCGAGGTTCC
 ACCTGTGTGAGGAAGTGGCGTCTGTGAAACACTATAGCGACTACTTCCCACTCAAGATGGTGAAGACGA
 AAGATATTTACCTGACCGCAACTACATCCTTGTCTGCCATCCTCATGGGCTCATGGCCATTATGTTT
 TGGTCACTTTGCCACTGACACAACAGGCTTTTCCAAGACCTTTCCCTGGTATCACTCCTTATATGCTCACA
 CTAGGAGCCTTTTTCTGGGTACCTTTCCCTCAGAGATTATGTAATGTCTACAGGGTCGTGCTCTGTGAGTA
 GATCCTCCATGGACTTTTTGCTTACCCAGAAGGGCACAGGCAACATGCTTGTGGTGGTGGTGGTGGCCCT
 GGCTGAGTGCAGATACAGCACGCCAGGCTTACCACCCTGTTCTTGAAGAAGCGGCAAGGCTTTGTGCGC
 ACAGCCCTTAAACATGGGGTGTCTTAATCCAGCTTATGCCTTTGGAGAGACAGACCTCTATGACCAGC
 ACATTTTCACTCCTGGGGCTTTGTCAATCGCTTCCAGAAGTGGTCCAGAAGATGGTACACATCTACCC
 CTGTGCTTTCTATGGGCGTGGCCTCACCAAGAACTCCTGGGGCTTCTGCCCTATTCTCAGCCAGTAACC
 ACTGTTGTTGGAGAACCCTACCAATTGCCAAGATTGAGAATCCGAGCGAGGAGATTGTGGCCAAATACC
 ACACACTATATTGATGCCCTACGAAAATTGTTTGATCAGCATAAGACCAAGTTTGGCATCTCAGAGAC
 CCAGGAGCTGGTGATAGTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG219385 representing NM_177746
 Red=Cloning site Green=Tags(s)

MFWPTKKDLKTAMEVFALEFQWALSALVIVTTVIVNLVYLVVFTSYWPVTVLMLTWLAFDVKTPERGGRRF
 TCVRKRWLWKHYSDFPLKMKVTKDISPDRNYILVCHPHGLMAHSCFGHFATDTTGFSGKTFPGITPYMLT
 LGAFFWVPLRDYVMSTGSCSVSRSSMDFLLTQKGTGNMLVVVVGGLAECRYSTPGSTTLFLKKRQGFVR
 TALKHGVSLIPAYAFGETDLYDQHIFTPGGFVNRFAQWFQKMHVYPCAFYGRGLTKNSWGLLPYSQPVT
 TVVGEPLPLPKIENPSEEIVAKYHTLYIDALRKLFDQHKTKFGISETQELVIV

TRTRPLE - GFP Tag - V

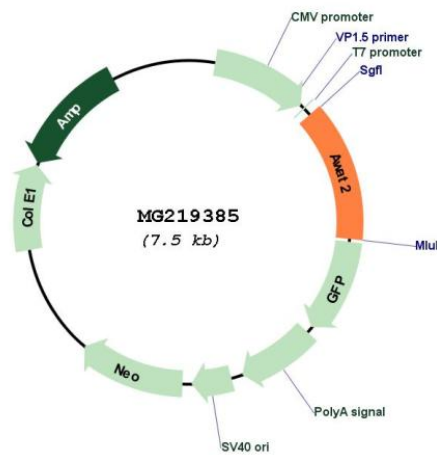
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_177746

ORF Size: 999 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:	<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:	NM_177746.4 , NP_808414.2
RefSeq Size:	1607 bp
RefSeq ORF:	1002 bp
Locus ID:	245532
UniProt ID:	Q6E1M8
Cytogenetics:	X C3
Gene Summary:	Acyltransferase that predominantly esterify long chain (wax) alcohols with acyl-CoA-derived fatty acids to produce wax esters. Wax esters are enriched in sebum, suggesting that it plays a central role in lipid metabolism in skin. Has no activity using decyl alcohol and significantly prefers the C16 and C18 alcohols. May also have 2-acylglycerol O-acyltransferase (MGAT) and acyl-CoA:retinol acyltransferase (ARAT) activities, to catalyze the synthesis of diacylglycerols and retinyl esters; however this activity is unclear in vivo (By similarity).[UniProtKB/Swiss-Prot Function]