

## Product datasheet for **MC209853**

### a (NM\_015770) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** a (NM\_015770) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** a  
**Synonyms:** A; As; ASIP; ASP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >MC209853 representing NM\_015770  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATGTCACCCGCCTACTCCTGGCCACCCTAGTGGCTTCCTGTGCTTCTCACCGTCCACAGCCACC  
TGGCACTCGAGGAGACGCTTGGAGATGACAGGAGTCTGCGGAGTAACTCCTCCATGAACTCGCTGGATTT  
CTCCTGTGTTTCTATCGTGGCACTGAACAAGAAATCCAAGAAGATCAGCAGAAAAGAAGCCGAGAAGCGG  
AAGAGGTCTTCCAAGAAAAGGCTTCGATGAAGAAGGTGGCAAGGCCCCCGCCACCTTCGCCTGCGTGG  
CCACCCGCGACAGCTGCAAGCCACCCGACCCGCCTGCTGCGACCCGTGCGCCTCCTGCCAGTGCCGTTT  
CTTCGGCAGCGCCTGCACCTGTGAGTACTCAACCCCAACTGCTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2270\\_c09.zip](https://cdn.origene.com/chromatograms/ja2270_c09.zip)

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_015770

**Insert Size:** 396 bp



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_015770.3](#), [NP\\_056585.2](#)

**RefSeq Size:** 692 bp

**RefSeq ORF:** 396 bp

**Locus ID:** 50518

**UniProt ID:** [Q03288](#)

**Cytogenetics:** 2 76.83 cM

**Gene Summary:** Involved in the regulation of melanogenesis. The binding of ASP to MC1R precludes alpha-MSH initiated signaling and thus blocks production of cAMP, leading to a down-regulation of eumelanogenesis (brown/black pigment) and thus increasing synthesis of pheomelanin (yellow/red pigment). Causes hair follicle melanocytes to synthesize phaeomelanin instead of black or brown pigment eumelanin and produces hairs with a subapical yellow band on an otherwise black or brown background when expressed during the mid-portion of hair growth.[UniProtKB/Swiss-Prot Function]