

## Product datasheet for **SC116358**

### HM74 (HCAR3) (NM\_006018) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HM74 (HCAR3) (NM_006018) Human Untagged Clone
Tag:	Tag Free
Symbol:	HM74
Synonyms:	GPR109B; HCA3; HM74; Puma-g; PUMAG
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:**

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>OriGene sequence for NM_006018 edited
GAATTCGGCACGAGACTTTGCTGGAGCATTCACTAGGCGAGGCGCTCCATCGGACTCACT
AGCCGCACTCATGAATCGGCACCATCTGCAGGATCACTTTCTGGAATAGACAAGAAGAA
CTGCTGTGTGTTCCGAGATGACTTCATTGCCAAGGTGTTGCCGCCGGTGTGGGGCTGGA
GTTTATCTTTGGGCTTCTGGGCAATGGCCTTGCCTGTGGATTTTCTGTTCCACCTCAA
GTCCTGGAATCCAGCCGGATTTTCTGTTCAACCTGGCAGTAGCTGACTTTCTACTGAT
CATCTGCCTGCCGTTTCGTGATGGACTACTATGTGCGGCGTTCAGACTGGAAGTTTGGGGA
CATCCCTTGCCGGCTGGTGCTTTCATGTTTGCCATGAACCGCCAGGGCAGCATCATCTT
CCTCACGGTGGTGGCGGTAGACAGGTATTTCCGGTGGTCCATCCCCACCACGCCCTGAA
CAAGATCTCCAATTGGACAGCAGCCATCATCTTGCCTTCTGTGGGCATCACTGTTGG
CCTAACAGTCCACCTCCTGAAGAAGAAGTTGCTGATCCAGAATGGCCCTGCAAATGTGTG
CATCAGCTTCAGCATCTGCCATACCTCCGGTGGCAGCAAGCTATGTTCCCTCGGAGTT
CCTCTGCCCTGGGCATCATCCTGTTCTGCTCAGCCAGAATTATCTGGAGCCTGCGGCA
GAGACAAATGGACCGCATGCCAAGATCAAGAGAGCCATCACCTTCATCATGGTGGTGGC
CATCGTCTTTGTCATCTGCTTCCCTCCAGCGTGGTTGTGCGGATCCGCATCTTCTGGCT
CCTGCACACTTCGGGCACGCAGAATTGTGAAGTGTACCGCTCGGTGGACCTGGCGTTCTT
TATCACTCTCAGCTTCACCTACATGAACAGCATGCTGGACCCCGTGGTGTACTACTTCTC
CAGCCCATCTTTCCCAACTTCTTCTCCACTTTGATCAACCGCTGCCTCCAGAGGAAGAT
GACAGGTGAGCCAGATAATAACCGCAGCAGGCGTCGAGCTCACAGGGGACCCCAACAA
AACCAGAGGCGCTCCAGAGGCGTTAATGGCCAACCTCCGGTGAGCCATGGAGCCCTCTTA
TCTGGGCCCAACCTCAAATAACCATTCGAAGAAGGACATTGTCACCAAGAACCAGCATC
CTGGAACCTCCAGATTCAGAGAATCTGATTTAGGAAAACGTGGCAGATGAGTGGGAGAC
TGTTTGAAGGTGTGACCGCAGGAATCCTGGAGAACAGAGAGTAAAGCTTCTAGGCATC
TGAAACTTGCTTCATCTCTGACGCTCGCAGGACTGAAGATGGGCAAATTGTAGGCGTTTC
TGCTGAGCAGAGTTGGAGCCAGAGATCTACTTGTGACTTGTGGCCTTCTTCCACATCT
GCCTCAGACTGGGGGGGCTCAGCTCCTCGGGTGATATCTAGCCTGCTTGTGAGCTTAG
CAGGGATAAGGAGAGCTGAGATTGGAGGAATTGTGTTGCTCCTGGAGGAAGCCAGGCA
TCATTAACAAGCCAGTAGGTCACCTGGCTTCCGTGGACCAATTCATCTTTCAGACAAGC
TTTAGCAGAAATGGACTCAGGGAAGAGACTCACATGCTTTGGTTAGTATCTGTGTTCCG
GTGGGTGAATAGGGATTAGCCCCAGAAGGACTGAGCTAAACAGTGTTATTATGGGAA
AGGAAATGGCATTGCTGCTTCAACCAGCGACTAATGCAATCCATTCCTCTTGTGTTAT
AGTAATCTAAGGGTTGAGCAGTTAAAACGGCTTCAGGATAGAAAGCTGTTTCCCACCTGT
TTGCTTTTACCATTAAAAGGGAAACGTGCCTCTGCCCCACGGGTAGAGGGGTGCACGTTT
CTCCTGGTTCTTCGCTTGTGTTTCTGTACTTACCAAAAATCTACCACCTCAATAAATTT
TGATAGGAAAAAAAAAAAAAAAAAAAAAATCGAC
    
```

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_006018 unedited  
 GTTACATTTTCGTATACGACTCACTATAGGGCGGCCCGCGATTCCGGCACGAGACTTTGCT  
 GGAGCATTCACTAGGCGAGGCGCTCCATCGGACTCACTAGCCGCACTCATGAATCGGCAC  
 CATCTGCAGGATCACTTTCTGGAATAGACAAGAAGAAGTGTGTGTGTTCCGAGATGAC  
 TTCATTGCCAAGGTGTTGCCCGCGGTGTTGGGGCTGGAGTTTATCTTTGGGCTTCTGGGC  
 AATGGCCTTGCCCTGTGGATTTTCTGTTTCCACCTCAAGTCTGGAAATCCAGCCGGATT  
 TTCCTGTTCAACCTGGCAGTAGCTGACTTCTACTGATCATCTGCCTGCCGTTTCGTGATG  
 GACTACTATGTGCGGCGTTCAGACTGGAAGTTTGGGGACATCCCTTGCCGCTGGTGCTC  
 TTCATGTTTGCCATGAACCGCCAGGGCAGCATCATCTTCCCTCACGGTGGTGGCGGTAGAC  
 AGGTATTTCCGGGTGGTCCATCCCACCACGCCCTGAACAAGATCTCAATTGGACAGCA  
 GCCATCATCTCTTGCCTTCTGTGGGCATCACTGTTGGCCTAACAGTCCACCTCTGAAG  
 AAGAAGTTGCTGATCCAGAATGGCCCTGCAAATGTGTGCATCAGCTTCAGCATCTGCCAT  
 ACCTTCCGGTGGCACGAAGCTATGTTCCCTCCTGGAGTTCCTCCTGCCCTGNGCATCATC  
 CTGTTCTGCTCAGCCAGAATTATCTGGAGCCTGCGGCAGAGACAAATGGACCGGCATGCC  
 CAGATCAAGAGAGCCATCACCTTCATCATGGTGGGTGGCATCGNCTTTGNCATCTGCCTT  
 CCCCAGCGNNGNTGTGCGGATCCGCATCTTCTGGCTCCTGCACACTTNGGCACCCANA  
 ATGNGAAGTGACCGCTCGTGGACCTGNNCGTCTTTATC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_006018 unedited  
 CCCCCCCATTAGTTGNACCGCGCCGCGATTCTANATCGAGTTTTTTTTTTTTTTTTTTTT  
 TTCCTATCAAAATTATTGAAGTGGTAGATTTTTGGTAAGTACAGAAACACAAGCGAAGGA  
 ACCAGGAGGAACGTGCACCCCTCTACCCGTGGGGCAGAGGCACGTTTCCCTTTAATGGT  
 AAAAGCAAACAGGTGGGAACAGCTTTCTATCCTGAAGCCGTTTTAACTGCTCAACCCTT  
 AGATTACTATAAAACAAGAGAGGAATGGATTGCATTAGTCGCTGGTTGAAAGCAGCAATGC  
 CATTTCCTTTCCATAATAACACTGTTTAGCTCAGTCCCTTCTGGGGCTAATCCCCTATT  
 ACACCCACCGAAACACAGATACTAACCAAGCATGTGAGTCTCTTCCCTGAGTCCATTT  
 CTGCTAAAGCTTGTCTGAAAGATGAATTGGTCCACGGAAGCCAGGTGACCTACTGGCTTG  
 TTTAATGATGCCTGGGCTTCTCCAGGAGCAACACAATCCCTCCAATCTCAGCTCTCTCT  
 TATCCCTGCTAGAGCTCACAAGCAGGCTAGATATCACCCGAGGAGCTGAGCCCCCCCAG  
 TCTGAGGCAGATGTGGGAAGAAGGCCAACAAAGTACAAGTATGATCTCTGGCTCCAACCT  
 GCTCAGCAGAAACGCCTACAATTTGCCCATCTTCACTCCTGCGAGCGTCAGAGATGAAGC  
 AAGTTTCAGATGCCTAGAAGCTTTACTCTCTGTTCCCTCCAGGATTCTGCGGTACACCT  
 TGCAACCAAGTCTCCCACTCATCTGCCACAGTTTCCCTAAATCAGATTCTCTGAATCTGGN  
 AAGTCCAGGAAACCTTAGGCCGAGTCCAGTGACATTACTCGATGCACAGCCCAAT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_006018

**Insert Size:**

2300 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:**

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\\_006018.1](#), [NP\\_006009.1](#)

**RefSeq Size:** 2051 bp

**RefSeq ORF:** 1164 bp

**Locus ID:** 8843

**UniProt ID:** [P49019](#)

**Cytogenetics:** 12q24.31

**Domains:** 7tm\_1

**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Gene Summary:** Receptor for 3-OH-octanoid acid mediates a negative feedback regulation of adipocyte lipolysis to counteract prolipolytic influences under conditions of physiological or pathological increases in beta-oxidation rates. Acts as a low affinity receptor for nicotinic acid. This pharmacological effect requires nicotinic acid doses that are much higher than those provided by a normal diet.[UniProtKB/Swiss-Prot Function]