

Product datasheet for **MC223367**

Mfhas1 (NM_001081279) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mfhas1 (NM_001081279) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mfhas1
Synonyms:	2310066G09Rik; D8Ertd91e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223367 representing NM_001081279 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTGGCCAGGACAGTGGCAACCTGAAGACGGTGAAGGCTGTGGCGGGACGCCGCCCTGAGAGCCAGGA
AGCTGCGGAGCAACCTGCGCCAGCTCACGCTCAGCTGCCAGGGGCCGAGGGCAGCCACTGGAGTCCCC
CGACGCCCCCAGCTGGTGTGCCGGCCAAATCGGGGACATTGAGGTGCTGAACCTGGGGAACAACGGC
CTCGAGGATGTGCTGAAGGTCTGGGGTCACTCTGGGCAGCCTTCGCGTCTTGGTCTTGCCGAGGAACC
GTTTTGCCCGGCTGCCCCCTGCGGTGGCGGAGCTAGGCCACCACCTTACCGAACTGGACGTCAGCCACAA
CCGGTTGACCATCCTGGGAGCCGAGGTGGTGAAGGCCCTGAGGGAGCTGCGCAAACCTCAACCTGAGCCAC
AACCAGTTGCCAGCCCTGCCTGCCAGCTGGGTGCCCTCGCCACCTGGAGGAGCTGGATGTCAGCTTCA
ACCGGCTGGCGCATCTGCCAGATTCTTCTCCTGCCTCAACCACCTTCGGACCCTTGACGTGGACCACAA
CCAGCTCACCGCCTTTCCCAGCAGCTGCTGCAGCTGGCTGCCCTGGAGGAGCTCGACGCTCCAGCAAC
CGGCTGCGAGGCCCTACCTGAGGATATCAGTGCCCTGCGTGCCTCAAGATCCTCTGGCTTAGCGGGGCCG
AGCTTGGCAGCTGCCAGAGGCTTCTGCGAGCTGGCCAGTTGGAGAGCCTCATGTTAGATAAACAACGG
GCTCCAGGCTCTGCCGACGAGTTCAGCCGTCTGCAGAGGCTCAAATGCTCAACCTCTCTTCCAACCTC
TTCGAGGAGTCCCTGCTGCGCTGCCCTGGCTGGTCTGGAGGAGCTCTATCTTAGTCGAATCAGC
TCACCTCAGTGCCCTCTTATCGCCGGGCTGGGTGCGCTTCTCACCTTGTGGCTGGATAATAACCGCAT
CCGGTACCTGCCAGACTCCATTGTGGAGCTGACTGGCCTGGAGGAGCTGGTGTCCAGGGCAACCAGATC
GCTGTGCTGCCGACAACCTTTGGCCAGCTCTCCCGGTAGGCTTGTGGAAAATCAAGGACAACCCACTGA
TTCAGCCCCCTTACGAAGTCTGCATGAAGGGGATCCCTTACATCGCAGCCTACCAGAAGGAACTGGCGCA
TTCGACGACCCGTCAGCCCCGGCTCAAGCTGCTCCTGATGGGCCACAAGGCTGCAGGAAGACCCTG
CTTCGACATTGCCTCACCGAGGACAAAGTGGAGGGAGGGCAAGGTGGAGGGGACAAGGAGAAGAGCTACC
TACCTTTCCCTCCCTTGGTAGTAAGGGCATCGAGGTGACCAGCTGGACAGCGGATGCTTCCCGGGGCTT
GCGGTTTATTGTATGACTTAGCCGGTATGAAAGCTATGAGGTGATACAGCCCTTCTTCTCTCCCT



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GGAGCCCTGTATGTGCTCGTGGTCAACTTGGCCACCTATGAACCTCGCTGCTTCCCTACCACCGTGGGCT
CCTTCTTGCATCGGGTGGGGGCCCGGTGCCTCACGCTGTGGTGTGATTGTAGGCACGCATGCGGACCT
GTGTGGGGAGCGGGAGCTTGAGGAGAAATGTCTGGACATTCACCGACAGATTGCCCTGCAGGAGAAGAAC
GATGCAGAGGGCCTTAGCCATCTAGCCAAGGTGGTGGATGAGGCCCTGGCTCGGGACTTCGAGCTGCGCT
CTGCCAGCCCTCACGCAGCCTACTACGGTGTTCAGACAAGAACCTTCGGAGGCGCAAGGCCATTTTCA
ATACTTGTCTAACACCAGGTTGCAGATCCTCTCTCCCGTGTGGCCGTAAGCTGCCGGGACCCCTCCAA
TTGCAACGCCTTCGAGACAAGTGTCTCTGTAGCTGAGCACCGAGAAATCTTTCCCAACTTACACCGAG
TCCTGCCTCGATCCTGGCAGTACTGGAGAACTGCACCTCCAGCCACCTCAGGCACAACGACTGTGGCT
GAGCTGGTGGGACTCTGCCCGCCTGGGCCTGCAGGCAGGTCTGACTGAGGACCGGCTCCAGAGTGTCTT
TCCTACCTGCACGAGAGCGGCAACTGTCTATTTTGGAGATAGCCAGCCCTCAAGGAGCATGTCTTCC
ACAACCTCACCCGCCTATTGACATCCTCAATGTCTTTTTCCAGAGAGATGCTTCATTGCTGCTGCATAA
ACTGCTCTTAGGGACCAATGGAGAGGGGGAGGGGGAGGGGAAAGTTCCCACTATAGCAGTGCCACGC
CCGGGTGAGGACCACTCCGGGCCACCCAGCTTCATCATTATGTGAAGGCTTTTTGCTGCATGGGCTTC
TGCCAGCCACATCATTGGTGTGCTTAAGCCTCATGTCCAGGCCAACAGGACTTCAGCTCCTGCT
GGAGCTGTGGAGAAGATGGGACTCTGTTACTGCCTCAATAAACCCAAAGCAAGCCTTTGAATGGTCC
CGGCATGGTACAAGTCCCATGCTACGTGCAGAAATGAGGTGCCCATGCAGAGGCTGGATTAATGGCA
CCAACCTAGCCGGGACGTCTTTTGTGGCTGAACAGTTACAGATCGAATATAGTTTTCCCTTCACCTTTCC
ACCTGGATTGTTGCGACGTTACAGTGTCCAGATCAACAGTACAGTGGTGCACAGGTGGATGGGAAATTT
CAGATCTTTGCATATAGAGGGAAAGTCCCGTGGTGGTGAAGTTACAGACCTGCCAAGGGGTTTTCGAGC
CCGACACCCTGTCCATTGCCAGCCATGCGTCACTACCAATATATGGACCGCATGGCAAGCCATCACCCC
TTTGGTAGAGGAACTGAATGTCTACTTCAGGAATGGCCTGGACTGCACTACACTGTGCACATCCTCTGT
TCTAAGTGCCTTAAGAGAGGGTCGCCAAATCCACACGCTTTCCAGGGGAGTTGCTGAGCCAGCCAGGC
CAGAAGGGGTGGCAGAGATCATCTGCCCAAGAATGGCAGCGAGCGAGTGAATGTGGCTTTGGTTACCC
ACCTACCCGACTGTGATCAGCCCTTGTCCAAGAAGAAGTGGTGAGAAGCACAGAAACAGTGA

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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Chromatograms: https://cdn.origene.com/chromatograms/ja1739_h04.zip

Restriction Sites: SgfI-MluI

ACCN: NM_001081279

Insert Size: 3147 bp

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 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:	<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_001081279.1, NP_001074748.1</u>
RefSeq Size:	6408 bp
RefSeq ORF:	3147 bp
Locus ID:	52065
UniProt ID:	<u>Q3V1N1</u>
Cytogenetics:	8 21.16 cM
Gene Summary:	Probable GTP-binding protein (By similarity). Functions in innate immunity and more specifically the inflammatory response as a regulator of the Toll-like receptor TLR2 and TLR4 signaling pathways (PubMed:20616063, PubMed:26599367). Negatively regulates the part of the TLR4 signaling pathway that leads to the activation of the transcription factor AP-1. By retaining the phosphatase complex PP2A into the cytoplasm, prevents the dephosphorylation of the AP-1 subunit JUN which is required for proper activation of the transcription factor (By similarity). Both inhibits and activates the TLR2-dependent signaling pathway (PubMed:26599367). Positively regulates the TLR2 signaling pathway to activate specifically the downstream p38 and JNK MAP kinases and promote the polarization of macrophages toward the pro-inflammatory M1 phenotype. It may also play a role in the regulation of inflammation induced by high glucose through the PKB/AKT signaling pathway. Also involved in erythrocyte differentiation through activation of the ERK1/ERK2 signaling pathway (By similarity).[UniProtKB/Swiss-Prot Function]