

Product datasheet for **MG209867**

5730559C18Rik (NM_028872) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	5730559C18Rik (NM_028872) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	5730559C18Rik
Synonyms:	1700034M08Rik; 4933426C09Rik; AI586180; D1Mgi54
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG209867 representing NM_028872
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGCAAATGCCGAAGTTAAATGAAATACCTCCGGGGAGGGAGGCCCGGGGAGCCTTGGGGAGAGG
GAAGATGGGCGGGACCAACAGGTCTGAAGCTGCGCGACCGCGCGGGGGCGCGGGGGCAGGCGCGAGG
CGCCAGAGCTCGGTGGGACAGCTGGGAACACTCCAGACTACCTACACATCCTGGCCAGGCTGGGACCAG
TGCAGCCCTCCTTCTGTGCCCCCTTCCAGAACTCATCATGGAGAGTAAGGATGAAGTCACTG
ACTCCGACAGCGGCATCATCCTGCAGTCTGGCCCGACAGCCCTGTCTCTCCAATGAAAGAGCTGACCAA
TGCAGTACGAAGCAGCAGAGGGCTCTGGAAGCGAGGCTGGAGGCCTGCCTGGAGGAGCTGCGCAGACTC
TGCTGAGGGAGGCGGAGCTGACTGGGACTTTGCCGCGAGATATCCCTTAAGCCTGGTGAAGAAGGCC
CCAAGTCCGGCGCAGGATCGGAGCAGCGTACAAGCTGGATGAGTGGCCCTCCACAGAGAGGACCCCT
GAGCAGCTAGAGCGCCAGTTGGCTCTGCAGTTCAGATCACCGAGGCGGCTCGAAGGCTGTGTGCAGAG
GAGAACCTCAGCAGACAGGCACGCAGGCAGCGGAAGCACGCTGCGCTGCAGGAGGAGAAGAAGCTGCGGG
ACCTTCAGCGTTGCCTGGGTGATCGGCGCGGAACAGTGAAGCCCTCCTACCACTGTGCCCTCCCTGGG
CAGAGAACTCAGTGCCTCTGACGACAGCTCCCTGTCTGATGGGCTGCTCCTGGAGGAAGAAGACTCCAA
GCGCCAAAACCTCCCCAGAGTACCGGCACCCTTCGCGGCCCTCTCCACCCAGAGCCTTGAGGGCC
TACAGCCAAACAGGACCTGAGTCTGGCGGCCAGGAACGGGCTCCCATCCAAAACAGTCCCTGGAAGGAGAC
CAGCCTGGACCACCCCTATGAGAAGCCAGGAAGTCTTCTGAGCTCAGTAGCGAGTCCAGCAGCCCGGCC
ACCACTCCTCAGGACCAGCCCAACCCTCCAGCCTGTGGGTGCTGGATGCTGCCTTTACCACGTGGTCC
CCATCCGAAATGTTCCCGGCCAGCGTCAGGGCCGCACCAAGTGCACCCAGCCACCCCTGAGATGCAGGGCAG
GAGGGGCCAGTCACAGTCTCTGAGGGTGGACTCCTTCCGAGCAGGCGCGGAGGGCCGAGGTCGCAAGTGC
TTTCCCGCCGCGCCCACTCATTACACAGTGCAGTGCAGACTCCTGCTTACACCCGGCAAGCCCC
CACTGCCACACCCTGCCTGCCATTCTGCTCTGAAGACAGTGGCTCTGATGTCTCCAGCATCTCCCATCC
CACCTCACCTGGCAGCAGCAGTCCAGACATCTCCTTTCTGAGGCCCTCTGTCTCCCTGAGCCACCTCGC
CACCGTGGGGCTGGGGCCAGCCTGTGGCAGAGAGCTGGCCCTCATTACTCTAAACTTCTGCTACCCG
CTGGATACTTCCAAACGGGGCGCTATGTGATGGTGGCCGAGGGCCACCTGCCCGGGGCGAGTGGGAGCT
GTGTCGTGCAGCCGTGGGTGCTGCCTATGACGAGGAAGGTGCACCCTGCGTTACCAGCGACTGGTACCC
TCCACAGCCGATTGTGCGCACACCCTACTAAAGGACAGTCTGCGGGCCGGGACTCAGCAAGGCAG
CAGTCTCGGAGGAGCTCAAGTGGTGGCATGAACGCGCACGTCTCCGAGCAGCCGCCCCACTCGCTCGA
CCGCCAAGGGGCGTTCCGTGTTAGGAGTCTGCCTCCTGGGAGGGAGAGCTTCGGGCGGGCCTCAGGACCC
AGGACACAGGTGCCCCCGTGTACGTACTCCGAGGTCGACGGACGGGGCCCAAGTGAAGTCTTTGTGC
CTGAGAACGGAGAGATTATCAGCCAAGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG209867 representing NM_028872
 Red=Cloning site Green=Tags(s)

MLQMPKLNEIPPGRGGPGEPWGEGRWAGPTGPEAARPARGARGQARGARARWDSWEHSRLPTHPPGWDQ
 CSPSFLCAPSSQKLIMESKDEVSDDSGIILQSGPDSPVSPMKELTNAVRKQQRAL EARLEACLEELRRL
 CLREAELTGTLPAEYPLKPGEKAPKVRRI GAAYKLDEWALHREDPLSSLERQLALQLQITEAARRLCAE
 ENLSRQARRQRKHAALQEEKLRDLQRCLGDRRRNSEPPPTTVP SLGRELSA SDDSSLS DGLLLEEEDSQ
 APKPPPE SPAPPSRPLPPQSLEGLQPTGPESGGQERAPIQNSPWKETSLDHPYEKPRKSSEL SSES SPA
 TTPQDQPNPSSLWVLDAAASYHVVP I RNVPGQRQGRTSAPATPEMQRRGQSQSLRVDSFRAGAEGGRSA
 FRRRPTHYTVTPDSCFTPGKPLPHPACHSCSEDSGSDVSSI SHPTSPGSSSPDISFLRPLCLPEPPR
 HRGAWGPACGRELAPHYSKLLL PAGYFPTGRYVMVAEGHLPPEWELCRAAVGAA YDEEGAPLRYQLVP
 SHSRIVRTPSLKDSPAGRGLSKAAVSEELKWWHERARLRSSRPHSLDRQGA FRVRS LPPGRESFGRASGP
 RTQVPPVYVLRSTDGAPVQVFPENGEIISQV

TRTRPLE - GFP Tag - V

Restriction Sites:

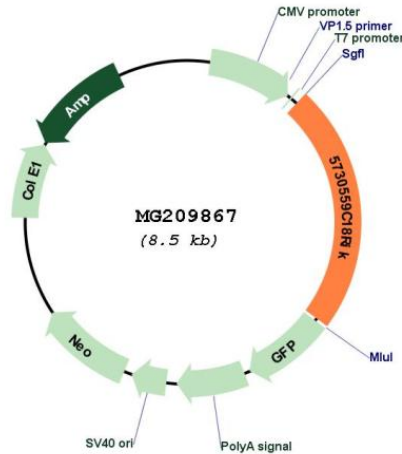
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_028872

ORF Size: 1989 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:

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_028872.2](#), [NP_083148.2](#)

RefSeq Size: 3013 bp

RefSeq ORF: 2034 bp

Locus ID: 67313

UniProt ID: [Q7TN12](#)

Cytogenetics: 1

Gene Summary: Expressed in peripheral macrophages and intestinal myeloid-derived cells, is required for optimal PRR (pattern recognition receptor)-induced signaling, cytokine secretion, and bacterial clearance. Upon stimulation of a broad range of PRRs (pattern recognition receptor) such as NOD2 or TLR2, TLR3, TLR4, TLR5, TLR7 and TLR9, associates with YWHAQ/14-3-3T, which in turn leads to the recruitment and activation of MAP kinases and NF-kappa-B signaling complexes that amplifies PRR-induced downstream signals and cytokine secretion (By similarity). In the intestine, regulates adherens junction stability by regulating the degradation of CYTH1 and CYTH2, probably acting as substrate cofactor for SCF E3 ubiquitin-protein ligase complexes. Stabilizes adherens junctions by limiting CYTH1-dependent ARF6 activation (PubMed:29420262).[UniProtKB/Swiss-Prot Function]