

## Product datasheet for **MG207074**

### Efemp2 (BC012269) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Efemp2 (BC012269) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Efemp2
Synonyms:	0610011K11Rik; Fbln4; MBP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG207074 representing BC012269 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTCCCTTTTGCCTCCTGCCTCCCCGGGTCTTTGCTGCTCTGGCGTTTCTGCTGTTGCTCTTGGGAG  
CAGCGTCCCCACAGGATCCCAGGAGCCGGACAGCTACACGGAATGCACAGATGGCTATGAGTGGGATGC  
AGACAGCCAGCACTGCCGGGATGTCAACGAGTGCCTGACCATCCCAGGAGCTTGAAGGGTGAGATGAAA  
TGCATCAACCACTACGGGGTTATTTGTGTCTGCCTCGCTCTGCTGCCGTCATCAGTGATCTCCATGGT  
AAGGACCTCCACCGCCAGCGGCCATGCTCAACAACCAACCCTTGCCCGCAGGGCTACGAGCCTGATGA  
ACAGGAGAGCTGTGTGGATGTGGACGAGTGTACCCAGGCTTTGCATGACTGTCCGCTAGTCAGGACTGC  
CATAACCTTCCTGGCTCCTACCAGTGCACCTGCCTGATGGTTACCGAAAAATTGGACCCGAATGTGTGG  
ACATAGATGAGTGTGTTACCGCTATTGCCAGCATCGATGTGTGAACCTGCCGGGCTTTTTTCGATGCCA  
GTGTGAGCCAGGCTTCCAGTTGGGACCTAACACCCGCTCTGTGTGGATGTGAATGAGTGTGACATGGGA  
GCCCCATGTGAGCAGCGCTGCTTCAACTCCTATGGGACCTTCTGTGTGCTGTAAACAGGGCTATGAGC  
TGCACCGGGATGGCTTCTCCTGCAGCGATATCGATGAGTGCAGGCTACTCCAGTTACCTCTGCCAGTACCG  
CTGTGTCAACGAGCCAGGCCGATTCTCCTGTCACTGCCACAAGGCTACCAGTGTGCTGCTCAAGGCTC  
TGCCAAGATATTGACGAGTGTGAACAGGTGCACACCAATGTTCTGAGGCCAAACCTGTGTCAACTTCC  
ATGGGGTTACCCTGTGTGGACCAACCGTTGTGTGGAGCCCTATGTCCAAGTGTGAGACCAACCGCTG  
CCTCTGCCCTGCCTCCAATCCCCTTTGTGCGAGAGCAGCCTTCATCCATTGTGCACCGCTACATGAGCATC  
ACCTCAGAGCGAAGTGTGCCTGCTGACGTGTTTCAGATCCAGGCAACCTCTGTCTACCCTGGTGCCTACA  
ATGCCTTTCAGATCCGTTCTGGAACACACAGGGGACTTCTACATTAGGCAAAATCAACAATGTCAGCGC  
CATGCTGGTCTCGCCAGGCCAGTGACGGGACCCGGGAGTACGTGTGGACCTGGAGATGGTACCATG  
AATCCCTTATGAGCTACCGGCCAGCTCTGTACTGAGACTCACGGTCTTTGTGGAGCCTATACCTTC

**ACCGTACCGGCCGCTCGAG** - GFP Tag - GTTTAA



[View online »](#)

**Protein Sequence:** >MG207074 representing BC012269  
 Red=Cloning site Green=Tags(s)

MLPFASCLPGSLLLWAFLLLLLGAASPQDPEEPDSYTECTDGYEWDADSQHCRDVNECLTIPEACKGEMK  
 CINHYGGYLCLPRSAAVISDLHGEGPPPPAAHAQQPNPCPQGYEPDEQE SCVDVDECTQALHDCRPSQDC  
 HNLPGSYQCTCPDGYRKIGPECVDIDECRYRQCQHRVCVNLPGSFRQCCEPGFQLGPNNRSCVDVNECDMG  
 APCEQRCFNSYGTFLCRCNQGYELHRDGFSCSDIDECEGYSSYLQYRCVNEPGRFSCHCPQGYQLLATRL  
 CQDIDECETGAHQCEAQT CVNFHGGYRCVDTNRCVEPYVQVSDNRCLCPASNPLCREQPSIVHRYMSI  
 TSERSVPADVFIQATSYPGAYNAFQIRSGNTQGDIFYIRQINNVSAMLVLARPVTGPREYVLDLEMVMT  
 NSLMSYRASSVLRLTVFVGAYTF

TRTRPLE - GFP Tag - V

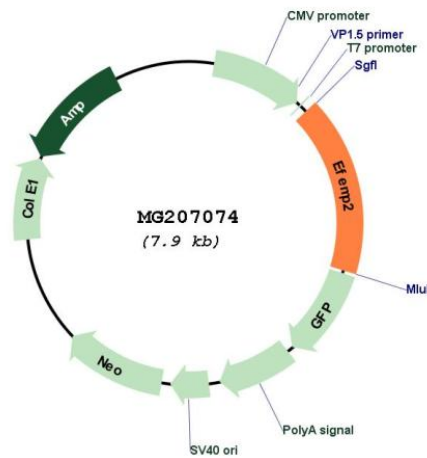
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

BC012269

<b>ORF Size:</b>	1331 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">BC012269</a> , <a href="#">AAH12269</a>
<b>RefSeq Size:</b>	1724 bp
<b>RefSeq ORF:</b>	1331 bp
<b>Locus ID:</b>	58859
<b>Cytogenetics:</b>	19 A
<b>Gene Summary:</b>	Plays a crucial role in elastic fiber formation in tissue, and in the formation of ultrastructural connections between elastic laminae and smooth muscle cells in the aorta, therefore participates in terminal differentiation and maturation of smooth muscle cell (SMC) and in the mechanical properties and wall integrity maintenance of the aorta (PubMed:16478991, PubMed:19855011, PubMed:20019329, PubMed:26486174, PubMed:26711913, PubMed:28508064). In addition, is involved in the control of collagen fibril assembly in tissue through proteolytic activation of LOX leading to cross- linking of collagen and elastin (PubMed:26690653, PubMed:26711913, PubMed:26220971, PubMed:26178373). Also promotes ELN coacervation and participates in the deposition of ELN coacervates on to microfibrils but also regulates ELN cross- linking through LOX interaction (PubMed:17324935). Moreover adheres to the cells through heparin binding in a calcium-dependent manner and regulates vascular smooth muscle cells proliferation through angiotensin signaling (PubMed:23636094).[UniProtKB/Swiss-Prot Function]