

## Product datasheet for **MG220368**

### Grb14 (NM\_016719) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Grb14 (NM_016719) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Grb14
Synonyms:	A1505286
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG220368 representing NM\_016719  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACCACGTCCCTGCAAGACGGGCAGAGCGCCGCGGGCCGGCAGGCGCCAGGATTCCGCCGTGGCAG  
 TGCAGGTGTGCCGCGTTGCCAGGGCAAGGGAGACGCCAGGACCGGGCAGGTTCCCGGACTGCACGC  
 GCTGTCCCCCGCCTCCGATGCGACCCTCCGCGGTGCCATAGACAGGAGAAAAATGAAAGATCTGGATGTT  
 CTGAAAAAGCCACCCATTCCAACCCCTTCTGAGCTCTGCTGCTCTCCGCTTACATCTGTGCTGCAG  
 CAGGCCTGTTTCCAGGGCCAATTAAGGAAGAAGCAGGTGATTAAGTTTACAGCGAGGATGAAACCCAG  
 CAGAGCATTAGAGGTGCCAGTGACATCACAGCCCGAGATGTTTGCCAGCTGTTGATCCTGAAGAACCAC  
 TATGTGGACGACAACAGCTGGACCCTTTTGGACACCTATCTCACATAGGTTTGAAGAAGCCGTAGAGG  
 ACCACGAGCTGCCAACTGAAGTGTCTCACTGGGAGTGGAAGAAGACAATAAGCTGTATCTTAGAAA  
 GAATTATGCCAAATATGAATTTTTAAGAACCCAATGTATTTCTTCCAGAGCACATGGTGTCTTTTGCA  
 GCTGAAATGAATGGTGACAGATCCCTACACAGATACTGCAGGTGTTTTAAGCTCCAGCAGCATCCTG  
 AAATCCATGGCTTCTTACATGCAAGGAACAGGAAAAGAAGTCTTGAAAAAAGCTTACTTTTTTCTCAG  
 AAGATCTGGCTTATTTTTCTACTAAAGGCACATCCAAGGAACCACGGCATTGCGAGCTTTTCACTGAA  
 TTCAGCACTAGTCACGTTTATATGTCACTGGCAGGAAAAAACAACGGAGCGCCAACCTCCATGGAT  
 TCTGCTTAAAGCCTAACAAAGCAGGAGGGCCCCGGGACCTGAAAATGCTCTGTGCAGAAGAAGAGCAGAG  
 CAGGACGTGCTGGGTGACCGCCATCCGACTGCTGAAGGATGGCATGCAGCTGTATCAGAATTATATGCAT  
 CCATACCAAGGTAGAAGCGCCTGCAATTCTCAGAGCATGTACCCATGAGAAGCGTATCAGAGAATTCCT  
 TAGTAGCAATGGACTTCTCAGGTGAGAAGAGCAGAGTCATAGACAACCCCACTGAAGCGCTTTCGGTTGC  
 TGTTGAGGAAGGCCTCGCGTGGAGGAAAAAAGGCTGTTTACGCTGGGGAATCACGGAAGCCCCAGTGCC  
 CCCTCCAGAGCTCTGCTGTGAACATGGCTCTCCATCGGTCCCAACCATGGTTTACCACAGAATTTCCA  
 GAGATGAGGCTCAGCGGCTGATCATTCCGCAGGGGCTGTGGATGGAGTTTTCTGGTACGGGATAGTCA  
 GAGTAACCCAGAACTTTTGTACTGTCAATGAGTCATGGACAAAAGATAAAACACTATCAAATTATACCC  
 GTAGAAGATGATGGTGGCTGTTCCATACTCTGGATGATGGCCATACGAAGTTCACAGACCTCATCCAGC  
 TGGTGGAGTTCTACCAGCTCAACAGGGGGTCTTCTTGAAGCTGAAGCATTACTGTGCTAGGATGGC  
 TGTT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG220368 representing NM\_016719  
 Red=Cloning site Green=Tags(s)

MTTSLQDGQSAAGRAGAQDSPLAVQVCRVAQKGDAQDPAQVPGLHALSPASDATLRGAIDRRKMKDLDV  
 LEKPPIPNPFPELCCSPLTSVLSAGLFPRANSRKKQVIKYYSEDETSRALEVPSDITARDVCQLLILKNH  
 YVDDNSWTLFEHLSHIGLERTVEDHELPTVEVLSHWGVEEDNKLYLRKNYAKYEFFKNPMPYFFPEHMSFA  
 AEMNGDRSPTQILQVFLSSSTYPEIHGFLHAKEQKKSWKAYFFLRRSGLYFSTKGTSCKEPHRLQLFSE  
 FSTSHVYMSLAGKKKHGAPTPYGFCLKPNKAGGPRDLKMLCAEEEQSRTCWVTAIRLLKDGMLYQNYMH  
 PYQGRSACNSQSMSPMRSVSENSLVAMDFSGEKSVIDNPTEALSVAVEEGLAWRKKGCLRLGNHGSPSA  
 PSQSSAVNMALHRSQPWFHHRISRDEAQRLLIRQGPVDGVFLVRDSQSNPRTFVLSMSHGQKIKHYQIIP  
 VEDDGELFHTLDDGHTKFTDLIQLVEFYQLNRGVLPCCLKHYCARMV

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI



<b>ACCN:</b>	NM_016719
<b>ORF Size:</b>	1614 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="#">NM_016719.1</a> , <a href="#">NP_057928.1</a>
<b>RefSeq Size:</b>	1978 bp
<b>RefSeq ORF:</b>	1617 bp
<b>Locus ID:</b>	50915
<b>UniProt ID:</b>	<a href="#">Q9JLM9</a>
<b>Cytogenetics:</b>	2 C1.3
<b>Gene Summary:</b>	Adapter protein which modulates coupling of cell surface receptor kinases with specific signaling pathways. Binds to, and suppresses signals from, the activated insulin receptor (INSR). Potent inhibitor of insulin-stimulated MAPK3 phosphorylation. Plays a critical role regulating PDPK1 membrane translocation in response to insulin stimulation and serves as an adapter protein to recruit PDPK1 to activated insulin receptor, thus promoting PKB/AKT1 phosphorylation and transduction of the insulin signal (By similarity).[UniProtKB/Swiss-Prot Function]