

## Product datasheet for **MG216525**

### Peak1 (NM\_172924) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Peak1 (NM_172924) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Peak1
Synonyms:	1110049L02Rik; 9530046P14; AA690169; BE132841; C230081A13Rik; mKIAA2002; SGK269
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG216525 representing NM_172924 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGCTTGTAAACACCTTTACTGAACACGTTTGGAAACCTGGCGAATGCAAGAATTGCTTTAAACCTA  
AAAGCTTGCACCAGCTTCTCCAGACTCTGAGAAGACGCCATCACCCACGGCAGTGGGAAAACCTAATGC  
CAATCACAGTAACAACCACCGAGTCAGGAGCACGGCAACTTCGGCCCCCTGTGGCTAAAAAGCCACC  
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CAACAATTCTGAAGGTGATGCTGAAGGCTTTGGCAGTGATCCTCAGCAGTGTGCCAATAATGACAGTGCA  
CAGAAGATATCCAATAACAACAACGGGCTAACTGAAGTGCTAAAGGAGATAGCGGGCCTGGAAGCCACCC  
CTCCGGTCAGAGGAAATGAAACAACGCCAGAGAAACATCTTGGGAAGAATAAATGATTGCTACAAACG  
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GTGAGGAGAGTGAGGAAGATGTGCTTTTCAGTAACATGGAGGAGGAGCATGAGAGCTGGGATGAGAGCGA  
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GGGCGACCCAAGATAAAAAGGTTTCATCTTCTACTCCAAACTCTCCAGTTACATCACCTGCATTGACACCAG  
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 CAAAAGTGGTTAGACATCAAGCGAACCTGCTGATGATCAAGTTCGCGGAGAAGTCCCTGGACAGAGAGG

GGGGCATCAGCCTGGAGGACTGGCTTTGTGCTCAGTATCTGGCCTTTGCCACTACAGACTCCCTGAGCTA  
TATTGTAAAAATCCTGCAATACCGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG216525 representing NM\_172924  
Red=Cloning site Green=Tags(s)

MSACNTFTEHVWKPGECKNCFKPKSLHQLPPDSEKTPITHGSGKTANHNSNNHRVSTGNFRPPVAKKPT  
IAVKPTMMVADGQSVCGELSIQEHENKPVILGWNQNKTSLSQKPLNNNSEGDAEGFGSDPQQCANNDSA  
QKISNNNNGLTEVLKEIAGLEATPPVRGNETNARETFLGRINDCYKRSLERKIPPSMGTSMKDSQGHV  
ILSGSAEIVISNEGGRCYPEFSSGEESEEDVLF SNMEEEHESWDESEELLAMEIRMRGQPRFANFRANT  
LSPVRFVSKWNTIPLRNKSLQRICAVDYDDSYDEILNGYEENSGVSYGQGSVQSTISSDCTSPGSSFT  
EESRSETASSLSQKVCNGGISPGNPGNSKIDIAETESNFESPPGNNEEKDESLTSKSSVKVPETHKAVLAL  
RLQEKDGKIAVHTEKPEKASTDIAGQAVTISLVPVEEQTKPYRVVNLEQPLCKPYTVVDVSAAMASEHL  
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AYDNLAIYKSFGLTSGELSVKEKTTSVISHTYEEIETESKVSSTPSKLTDCPQAKGFSNSTERKRGVA  
QKVFQEFNCLNRGQSSPQRSYSSHTSSPAKIQRPTQEPAGKTEGAQGSQVPGSSSNSTREKASAVLCQIV  
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SEKPAIVFMYRCDPDQGHLSVDQSKAGAEEKGRAEEVLLRNSEEKSSYLP SQIPDKACSRVTHEVAGELS  
PRDPRTPAGKQDGT SVTPTLPPDLEREEKDDTL DPTDVSPCSATYSNLGQSRAAMIPPKHPRHPKGA  
DDAIAFGEKTDQEGLNASQPTPPPLPKMIRANTEPISKDLQKAMESSLVCMANPTYDIDPNWDASSAGS  
SISYELKGLDVESEYSLERPLHKERPVPSAANSISSLATLSVKDRFSNSMESLSSRRGLSYRQTRS IQKP  
QRQALYRGLDNREEVVGKLRSLHTDALKRLAVKCEDLFMAGQKQDLRFVGVDSWDFRLTSDKPCCEAGDA  
VYYTASYAKDPLSNYAVKICKSKAKESQYYHSLAVRQSLPVHFNIQQDCGHFLAEVPSRLLPWEDPDAP  
EKAEDGTEDSEEEGKAETLGGNPEPCSETEPSQKENQRVTNRKQRSHVVITREVPHTVADFVRDSL AH  
HGNSPDLYERQVCLLLLQLCSGLEHLKPYHVTHCDLRLNLLL VQHQPGGAAQGPSPADPCPTLACPTL  
IVSNFSQAKQKSHLVDPQILRDQSRLAPEIITATQYKCCDEFQTGIL IYEMHLPNPFDENPELKEKEYT  
RTDLPRIPLRSPYSWGLQQLASCLLNPNP SERILISDAKGILQCLLWGPREDLFQIFTTSATLAQKNALL  
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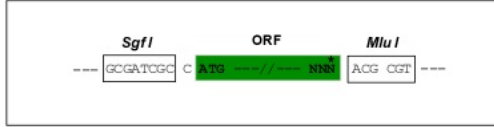
TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:

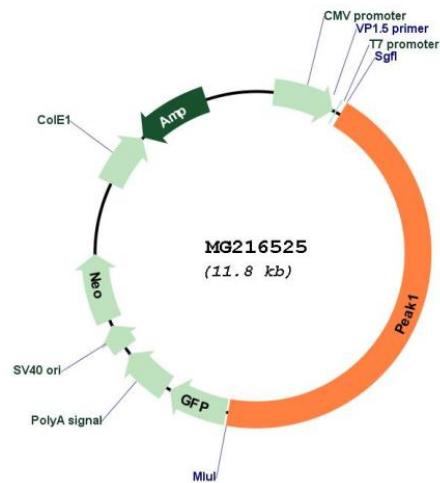
Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI  
 CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

HindIII NheI RsrII MluI NotI XhoI GFP Tag  
 CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---  
 T R T R P L E M E S D - - -

PmeI FseI  
 --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT  
 - - E E R V Stop

**Plasmid Map:**


**ACCN:** NM\_172924

**ORF Size:** 5205 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\\_172924.3](#), [NP\\_766512.2](#)

**RefSeq Size:** 10994 bp

**RefSeq ORF:** 5208 bp

**Locus ID:** 244895

**UniProt ID:** [Q69Z38](#)

**Cytogenetics:** 9 B

**Gene Summary:**

Probable catalytically inactive kinase. Scaffolding protein that regulates the cytoskeleton to control cell spreading and migration by modulating focal adhesion dynamics. Acts as a scaffold for mediating EGFR signaling.[UniProtKB/Swiss-Prot Function]