

## Product datasheet for MR226907

### Vip (NM\_011702) Mouse Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Vip (NM\_011702) Mouse Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Vip  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >MR226907 representing NM\_011702  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAAGCCAGAAGCAAGCCTCAGTTCCTGGCATTCTGATACTTTCAGTGTGCTGTTCTCTCAGTCGC  
 TGGCCTGGCCTCTCTTTGGACCACCTTCTGTAGTAGTAGGCTGGATGACAGGATGCCGTTTGAAGGAGC  
 AGGTGACCCTGACCAAGTCTCTTTAAAAGCAGACTCTGACATCTGCAGAATCCCTTAGCAGAAAATGCC  
 ACACCCATTATGATGTGTCAAGAAATGCCAGGCATGCTGATGGAGTTTTACCAGCGATTACAGCAGAC  
 TTCTGGGTCAGATTTCTGCCAAAAATACCTTGAGTCACTCATTGGCAAACGAATCAGCAGCAGCATCTC  
 GGAAGATCCTGTGCCAATCAAACGACACTCTGATGCCGCTTTCACAGATAACTACCCCGCCTCAGAAAG  
 CAAATGGCTGTGAAGAAATACCTGAACTCCATCCTGAATGGAAAGAGGAGCAGTGAGGGAGATTCTGCAG  
 ACTTTCTGAAGAGCTGGAGAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226907 representing NM\_011702  
 Red=Cloning site Green=Tags(s)

MEARSKPQFLAFLILFSLVFSQSLAWPLFGPPSVVSRLLDDRMPFEGAGDPDQVSLKADSDILQNPLAENG  
 TPYYDVSARNARHADGVFTSDYSRLLGQISAKKYLESLIGKRISSEI SEDPVPIKRHSDAVFTDNYTRLRK  
 QMAVKKYLNILNGKRSSEGDSADFLLEELEK

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mm9008\\_d04.zip](https://cdn.origene.com/chromatograms/mm9008_d04.zip)

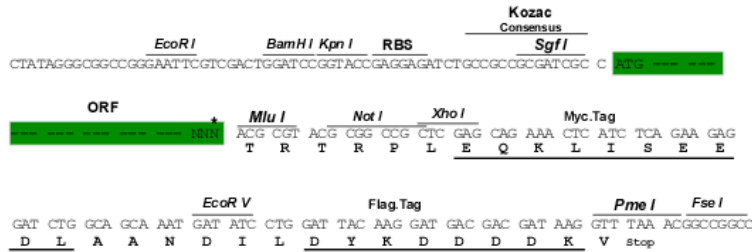
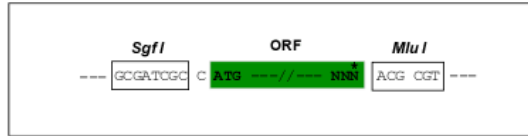
Restriction Sites: Sgfl-Mlul



[View online »](#)

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_011702

**ORF Size:** 513 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\\_011702.3](#)
**RefSeq Size:** 1527 bp

**RefSeq ORF:** 516 bp

**Locus ID:** 22353

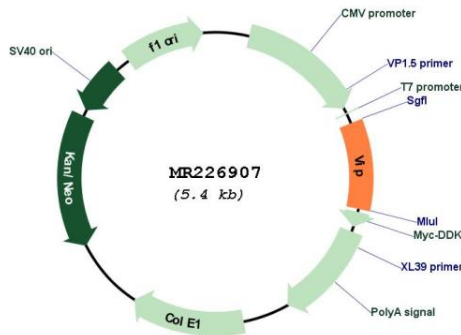
**UniProt ID:** [P32648](#)
**Cytogenetics:** 10 A1

**MW:** 19.6 kDa

**Gene Summary:**

This gene encodes a neuropeptide of the glucagon/secretin superfamily with potent bronchodilator, immunomodulator and anti-inflammatory properties. The encoded protein is proteolytically processed to generate two structurally similar neuropeptides - vasoactive intestinal peptide (VIP) and peptide histidine isoleucine (PHI). In the digestive tract, VIP stimulates relaxation of enteric smooth muscle, secretion of water and electrolytes, release of insulin and glucagon, and inhibition of gastric acid secretion. In the cardiovascular system, VIP causes coronary vasodilation and stimulates contractility in the heart. Mice lacking VIP exhibit airway hyperresponsiveness and airway inflammation. Male mice lacking VIP exhibit moderate pulmonary arterial hypertension resulting in increased mortality. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2015]

**Product images:**



Circular map for MR226907