

Product datasheet for RC217588

Gastrin Releasing Peptide (GRP) (NM_001012512) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Gastrin Releasing Peptide (GRP) (NM_001012512) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Gastrin Releasing Peptide
Synonyms: BN; GRP-10; preproGRP; proGRP
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC217588 representing NM_001012512
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGCGGCCGTGAGCTCCCGCTGGTCTGCTGGCGCTGGTCTCTGCCTGGCGCCCCGGGGCGAGCGG
TCCCGTGCCTGCGGGCGGAGGGACCGTCTGACCAAGATGTACCCGCGCGGCAACCACTGGGCGGTGGG
GCACTTAATGGGAAAAAGAGCACAGGGGAGTCTTCTTCTGTTTCTGAGAGAGGGAGCCTGAAGCAGCAG
CTGAGAGAGTACATCAGGTGGGAAGAAGCTGCAAGGAATTTGCTGGGTCTCATAGAAGCAAAGGAGAACA
GAAACCACCAGCCACCTCAACCAAGGCCCTGGGCAATCAGCAGCCTTCGTGGGATTCAGAGGATAGCAG
CAACTTCAAAGATGTAGTTCAAAGGCAAGGTTCTCAACGTGAAGGAAGGAACCCCACTGAACCAG
CAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217588 representing NM_001012512
Red=Cloning site Green=Tags(s)
MRGRELPLVLLALVLCCLAPRGRAVPLPAGGGTVLTKMYPRGNHWAVGHLMGKKSTGESSVSERGLKQQ
LREYIRWEEAARNLLGLIEAKENRNHQPPQPKALGNQQPSWDESSNFKDVGSKGKGSQREGRNPQLNQ
Q

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_001012512

ORF Size: 423 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_001012512.3](#)

RefSeq Size: 842 bp

RefSeq ORF: 426 bp

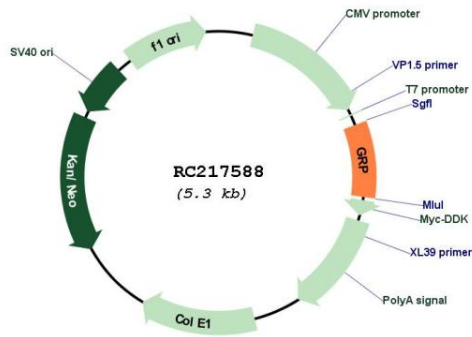
Locus ID: 2922

UniProt ID: [P07492](#)

Cytogenetics: 18q21.32
Protein Families: Secreted Protein
MW: 15.53 kDa

Gene Summary: This gene encodes a member of the bombesin-like family of gastrin-releasing peptides. The encoded preproprotein is proteolytically processed to generate two peptides, gastrin-releasing peptide and neuromedin-C. These peptides regulate numerous functions of the gastrointestinal and central nervous systems, including release of gastrointestinal hormones, smooth muscle cell contraction, and epithelial cell proliferation. These peptides are also likely to play a role in human cancers of the lung, colon, stomach, pancreas, breast, and prostate. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC217588