

## Product datasheet for SC301674

## OriGene Technologies, Inc.

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## Gastrin Releasing Peptide (GRP) (NM\_001012512) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Gastrin Releasing Peptide (GRP) (NM\_001012512) Human Untagged Clone

Tag: Tag Free

Symbol: Gastrin Releasing Peptide

Synonyms: BN; GRP-10; preproGRP; proGRP

Mammalian Cell

Selection:

None

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM\_001012512 edited

AA

**Restriction Sites:** Please inquire **ACCN:** NM 001012512

Insert Size: 800 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



## Gastrin Releasing Peptide (GRP) (NM\_001012512) Human Untagged Clone - SC301674

**OTI Annotation:** The ORF of this clone has been fully sequenced and found to be a perfect match to

NM\_001012512.1.

**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: <u>NM 001012512.1, NP 001012530.1</u>

 RefSeq Size:
 842 bp

 RefSeq ORF:
 426 bp

 Locus ID:
 2922

 UniProt ID:
 P07492

 Cytogenetics:
 18q21.32

**Protein Families:** Secreted Protein

**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]

Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding region, compared to variant 1, resulting in a shorter protein (isoform 2). This variant has also been identified as 'splice isoform 3' and 'pro-gastrin releasing peptide type 2'. The encoded

isoform (2) may undergo proteolytic processing similar to isoform 1.