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Product datasheet for RG219574

Pepsin (PGA4) (NM_001079808) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pepsin (PGA4) (NM_001079808) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pepsin
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG219574 representing NM_001079808
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGTGGCTGCTGCTGCTGGGTCTGGTGGCGCTCTCTGAGTGCATCATGTACAAGGTCCCCCTCATCA
GAAAGAAGTCCTTGAGGCGCACCCTGTCCGAGCGTGGCCTGCTGAAGGACTTCCTGAAGAAGCACAACCT
CAACCCAGCCAGAAAGTACTTCCCCCAGTGGGAGGCTCCCACCCTGGTAGATGAACAGCCCCTGGAGAAC
TACCTGGATATGGAGTACTTCGGCACTATCGGCATCGGAACTCCTGCCCAGGATTTCACCGTCGTCTTTG
ACACCGGCTCCTCCAACCTGTGGGTGCCCTCAGTCTACTGCTCCAGTCTTGCCTGCACCAACCACAACCG
CTTCAACCCTGAGGATTCTTCCACCTACCAGTCCACCAGCGAGACAGTCTCCATCACCTACGGCACCGGC
AGCATGACAGGCATCCTCGGATACGACACTGTCCAGGTTGGAGGCATCTCTGACACCAATCAGATCTTCG
GCCTGAGCGAGACGGAACCTGGCTCCTTCCTGTATTATGCTCCCTTCGATGGCATCCTGGGGCTGGCCTA
CCCCAGCATTTCCTCCTCCGGGGCCACACCCGTCTTTGACAACATCTGGAACCAGGGCCTGGTTTCTCAG
GACCTCTTCTCTGTCTACCTCAGCGCCGATGACAAGAGTGGCAGCGTGGTGATCTTTGGTGGCATTGACT
CTTCTTACTACACTGGAAGTCTGAACTGGGTGCCTGTTACCGTCGAGGGTTACTGGCAGATCACCGTGGA
CAGCATCACCATGAACGGAGAGACCATCGCCTGTGCTGAGGGCTGCCAGGCCATTGTTGACACCGGCACC
TCTCTGCTGACCGGCCCAACCAGCCCCATTGCCAACATCCAGAGCGACATCGGAGCCAGCGAGAACTCAG
ATGGCGACATGGTGGTCAGCTGCTCAGCCATCAGCAGCCTGCCCGACATCGTCTTCACCATCAATGGAGT
CCAGTACCCCGTGCCACCCAGTGCCTACATCCTGCAGAGCGAGGGGAGCTGCATCAGTGGCTTCCAGGGC
ATGAACGTCCCCACCGAATCTGGAGAGCTTTGGATCCTGGGTGATGTCTTCATCCGCCAGTACTTTACCG
TCTTCGACAGGGCAAACAACCAGGTCGGCCTGGCCCCTGTGGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

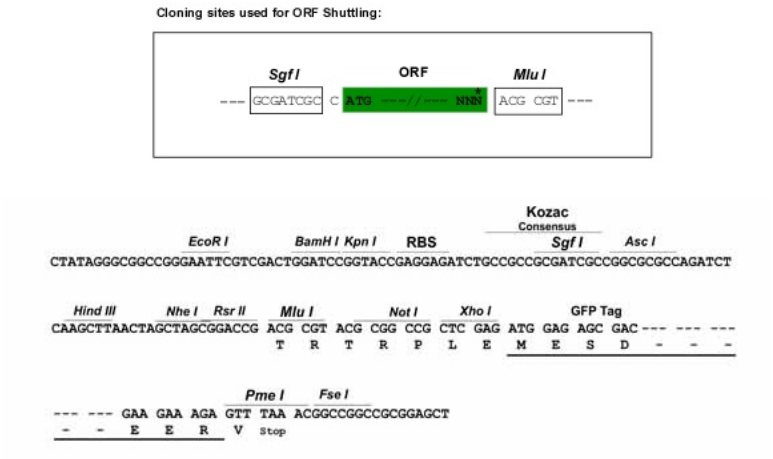
>RG219574 representing NM_001079808
Red=Cloning site Green=Tags(s)

MKWLLLLGLVALSECIMYKVPLIRKKSLRRTLSERGLLKDFLKKHNLNPARKYFPQWEAPTLVDEQPLEN
YLDMEYFGTIGIGTPAQDFTVVFDTGSSNLWVPSVYCSSLACTNHNRFNPEDSSTYQSTSETVSITYGTG
SMTGILGYDTVQVGGISDTNQIFGLSETEPGSFLYYAPFDGILGLAYPSISSSGATPVFDNIWNQGLVSQ
DLFSVYLSADDKSGSVVIFGGIDSSYYTGSLNWVPVTVEGYWQITVDSITMNGETIACAEGCQAIVDTGT
SLLTGPTSPIANIQSDIGASENSDGDMVVSCSAISSLPDIVFTINGVQYPVPPSAYILQSEGSCISGFQG
MNVPTESGELWILGDVFIRQYFTVFDRANNQVGLAPVA

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001079808

ORF Size: 1164 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_001079808.1, NP_001073276.1

RefSeq Size: 1395 bp

RefSeq ORF: 1167 bp

Locus ID: 643847

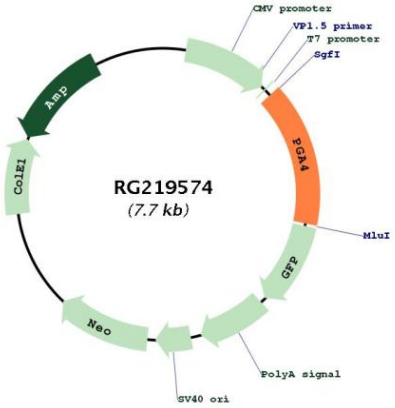
UniProt ID: P00790

Cytogenetics: 11q12.2

Protein Families: Druggable Genome

Gene Summary: This gene encodes a protein precursor of the digestive enzyme pepsin, a member of the peptidase A1 family of endopeptidases. The encoded precursor is secreted by gastric chief cells and undergoes autocatalytic cleavage in acidic conditions to form the active enzyme, which functions in the digestion of dietary proteins. This gene is found in a cluster of related genes on chromosome 11, each of which encodes one of multiple pepsinogens. Pepsinogen levels in serum may serve as a biomarker for atrophic gastritis and gastric cancer. [provided by RefSeq, Jul 2015]

Product images:



Circular map for RG219574