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Product datasheet for SC116819

GRPR (NM_005314) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GRPR (NM_005314) Human Untagged Clone
Tag:	Tag Free
Symbol:	GRPR
Synonyms:	BB2; BB2R; BRS2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC116819 sequence for NM_005314 edited (data generated by NextGen Sequencing)

ATGGCTCTAAATGACTGTTTCCTTCTGAACTTGGAGGTGGACCATTTCATGCACTGCAAC
ATCTCCAGTCACAGTGCGGATCTCCCCGTGAACGATGACTGGTCCCACCCGGGGATCCTC
TATGTCATCCCTGCAGTTTATGGGGTTATCATTCTGATAGGCCTCATTGGCAACATCACT
TTGATCAAGATCTTCTGTACAGTCAAGTCCATGCGAAACGTTCCAAACCTGTTCATTTCC
AGTCTGGCTTTGGGAGACCTGCTCCTCCTAATAACGTGTGCTCCAGTGGATGCCAGCAGG
TACCTGGCTGACAGATGGCTATTTGGCAGGATTGGCTGCAAACTGATCCCCTTTATACAG
CTTACCTCTGTTGGGGTGTCTGTCTTCACACTCACGGCGCTCTCGGCAGACAGATACAAA
GCCATTGTCCGGCCAATGGATATCCAGGCCTCTCATGCCCTGATGAAGATCTGCCTCAAA
GCCGCCTTTATCTGGATCATCTCCATGCTGCTGGCCATTCCAGAGGCCGTGTTTTCTGAC
CTCCATCCCTTCCATGAGGAAAGCACCAACCAGACCTTCATTAGCTGTGCCCCATACCCA
CACTCTAATGAGCTTCACCCCAAAATCCATTCTATGGCTTCCTTTCTGGTCTTCTACGTC
ATTCCACTGTCGATCATCTCTGTTTACTACTACTTCATTGCTAAAAATCTGATCCAGAGT
GCTTACAATCTTCCCGTGGAAGGGAATATACATGTCAAGAAGCAGATTGAATCCCGGAAG
CGACTTGCCAAGACAGTGCTGGTGTTTGTGGGCCTGTTCGCCTTCTGCTGGCTCCCCAAT
CATGTCATCTACCTGTACCGCTCCTACCACTACTCTGAGGTGGACACCTCCATGCTCCAC
TTTGTCACCAGCATCTGTGCCCGCCTCCTGGCCTTCACCAACTCCTGCGTGAACCCCTTT
GCCCTCTACCTGCTGAGCAAGAGTTTCAGGAAACAGTTCAACACTCAGCTGCTCTGTTGC
CAGCCTGGCCTGATCATCCGGTCTCACAGCACTGGAAGGAGTACAACCTGCATGACCTCC
CTCAAGAGTACCAACCCCTCCGTGGCCACCTTTAGCCTCATCAATGGAAACATCTGTCAC
GAGCGGTATGTCTAG

Clone variation with respect to NM_005314.2

View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005314 unedited
NGGTCAAAATTGTATACGACTCACTATAGGGCGGCCGCGATTCGCCCTTCTTATCTTCAT
CTTCACTCGGTTGCAAAATCAATAGTTAAGAAATAGCATCTAAGGGAACTTTTAGGTGGN
GAAAAAAAATCTAGAGATGGCTCTAAATGACTGTTTCCTTCTGAACTTGGAGGTGGACCA
TTTCATGCACTGCAACATCTCCAGTCACAGTGCGGATCTCCCCGTGAACGATGACTGGTC
CCACCCGGGGATCCTCTATGTCATCCCTGCAGTTTATGGGGTTATCATTCTGATAGGCCT
CATTGGCAACATCACTTTGATCAAGATCTTCTGTACAGTCAAGTCCATGCGAAACGTTCC
AAACCTGTTCATTTCCAGTCTGGCTTTGGGAGACCTGCTCCTCCTAATAACGTGTGCTCC
AGTGGATGCCAGCAGGTACCTGGCTGACAGATGGCTATTTGGCAGGATTGGCTGCAAACT
GATCCCCTTTATACAGCTTACCTCTGTTGGGGTGTCTGTCTTCACACTCACGGCGCTCTC
GGCAGACAGATACAAAGCCATTGTCCGGCCAATGGATATCCAGGCCTCTCATGCCCTGAT
GAAGATCTGCCTCAAAGCCGCCTTTATCTGGATCATCTCCATGCTGCTGGCCATTCCAGA
GGCCGTGTTTTCTGACCTCCATCCCTTCCATGAGGAAAGCACCAACCAGACCTTCATTAG
CTGTGCCCCATACCCACACTCTAATGAGCTTCACCCCAAAATCCATTCTATGGCTTCCTT
TCTGGTCTTCTACGTCATTCCACTGTCGATCATCTCTGTTTACTACTACTTCATTGCTAA
AAATCTGATCCAGAGTGCTTACCATCTTCCCGTGGAAGGAATATACATGTCAAGAAGCAG
ATTGAATCCCNGAAGCGACTTGNNCAGACGTGCTGGTGTTTGTGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_005314 unedited
NNGGGCCATGGGGATGGCAACTTCCAGGGCCAGNAAAGCACTGGGGNAGGGTCACAGGGA
TGCCACCCGGGATCTGTTCAGGAAACAGCTATGACCGCGGCCGCAATCTAGAGTCGACAA
GCTTGATATCGGTACCAGATCTGAATTCGCCCTTCACCTACACCACTCAGGAGCATTCTG
AAGGCTCTTTGGAGGGCACAGACACAACAATGGATGCAAGGGTTCCTGTCTAGCCATAAA
GCAAAACCGTCCCTCAGGGGGCAAAATCAAGGGTCAATCTAGACATACCGCTCGTGACAG
ATGTTTCCATTGATGAGGCTAAAGGTGGCCACGGAGGGGTTGGTACTCTTGAGGGAGGTC
ATGCAGGTTGTACTCCTTCCAGTGCTGTGAGACCGGATGATCAGGCCAGGCTGGCAACAG
AGCAGCTGAGTGTTGAACTGTTTCCTGAAACTCTTGCTCAGCAGGTAGAGGGCAAAGGGG
TTCACGCAGGAGTTGGTGAAGGCCAGGAGGCGGGCACAGATGCTGGTGACAAAGTGGAGN
CATGGAGGTGTCCACCTCAGAGTAGTGGTAGGAGCGGTACAGGTAGATGACATGATTGGG
GAGCCAGCAGAAGGCGAACAGGCCCACAAACACCAGCACTGTCTTGGCAAGTCGCTTCCG
GGATTCAATCTGCTTCTTGACATGTATATTCCCTTCCCGGGAAGATTGTAGCACTCTGGA
TCAGATTTTTAGCAATGAAGTAGTAGTAAACAGAGATGATCGACAGTGAATGACGTAGAA
GACCAGAAAGGAGCATAGATGGNATTTGGGGGTAAGCTCATAAGTGTGGGGTATGGGCAC
ATAATGAAGNNGNGGGGGGGGCTTCTCATGAGGGGGTGGGGGGGGAAAAAACCCGCTTTT
GGAGTCACAN

Restriction Sites: Please inquire

ACCN: NM_005314

Insert Size: 1700 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).

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_005314.2, NP_005305.1
RefSeq Size:	2681 bp
RefSeq ORF:	1155 bp
Locus ID:	2925
UniProt ID:	P30550
Cytogenetics:	Xp22.2
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Calcium signaling pathway, Neuroactive ligand-receptor interaction
Gene Summary:	Gastrin-releasing peptide (GRP) regulates numerous functions of the gastrointestinal and central nervous systems, including release of gastrointestinal hormones, smooth muscle cell contraction, and epithelial cell proliferation and is a potent mitogen for neoplastic tissues. The effects of GRP are mediated through the gastrin-releasing peptide receptor. This receptor is a glycosylated, 7-transmembrane G-protein coupled receptor that activates the phospholipase C signaling pathway. The receptor is aberrantly expressed in numerous cancers such as those of the lung, colon, and prostate. An individual with autism and multiple exostoses was found to have a balanced translocation between chromosome 8 and a chromosome X breakpoint located within the gastrin-releasing peptide receptor gene. [provided by RefSeq, Jul 2008]