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Product datasheet for RC206451

REG1 beta (REG1B) (NM_006507) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	REG1 beta (REG1B) (NM_006507) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	REG1 beta
Synonyms:	PSPS2; REGH; REGI-BETA; REGL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC206451 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCAGACCAACTCGTTCTTCATGCTGATCTCCTCCCTGATGTTCCTGTCTCTGAGCCAAGGCCAGG
AGTCCCAGACAGAGCTGCCTAATCCCCGAATCAGCTGCCCAGAAGGCACCAATGCCTATCGCTCCTACTG
CTACTACTTTAATGAAGACCCTGAGACCTGGGTTGATGCAGATCTCTATTGCCAGAACATGAATTCAGGC
AACCTGGTGTCTGTGCTCACCCAGGCGGAGGGTGCCTTCGTGGCCTCACTGATTAAGGAGAGTAGCACTG
ATGACAGCAATGTCTGGATTGGCCTCCATGACCCAAAAAAGAACCGCCGCTGGCACTGGAGTAGTGGGTC
CCTGGTCTCCTACAAGTCCTGGGACACTGGATCCCCGAGCAGTGCTAATGCTGGCTACTGTGCAAGCCTG
ACTTCATGCTCAGGATTCAAGAAATGGAAGGATGAATCTTGTGAGAAGAAGTTCTCCTTTGTTTGCAAGT
TCAAAAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206451 protein sequence
Red=Cloning site Green=Tags(s)

MAQTNSFFMLISSLMFLSLSQGQESQTELPNPRISCPEGTNAYRSYCYYFNEDPETWVDADLYCQNMNSG
NLVSVLTQAEGAFVASLIKESSTDDSNVWIGLHDPKKNRRWHWSSGSLVSYKSWDTGSPSSANAGYCASL
TSCSGFKKWKDESCEKKFSFVCKFKN

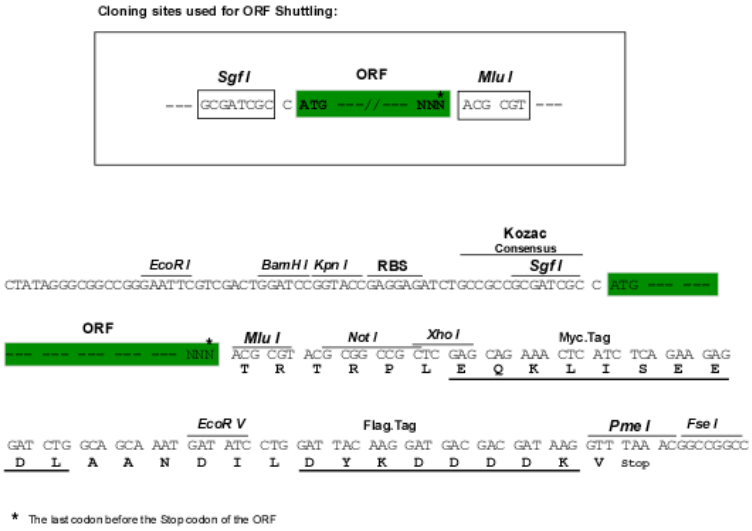
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6328_c06.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006507

ORF Size: 498 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_006507.4

RefSeq Size: 812 bp

RefSeq ORF: 501 bp

Locus ID: 5968

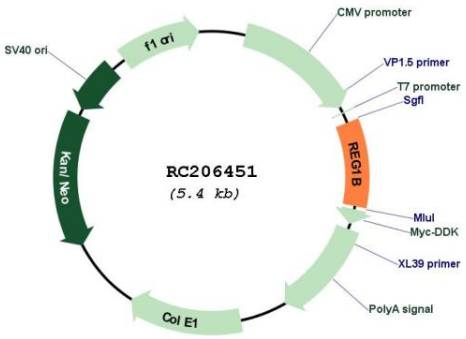
UniProt ID: P48304

Cytogenetics: 2p12

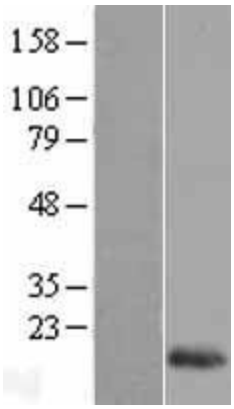
MW: 18.7 kDa

Gene Summary: This gene is a type I subclass member of the Reg gene family. The Reg gene family is a multigene family grouped into four subclasses, types I, II, III and IV based on the primary structures of the encoded proteins. This gene encodes a protein secreted by the exocrine pancreas that is highly similar to the REG1A protein. The related REG1A protein is associated with islet cell regeneration and diabetogenesis, and may be involved in pancreatic lithogenesis. Reg family members REG1A, REGL, PAP and this gene are tandemly clustered on chromosome 2p12 and may have arisen from the same ancestral gene by gene duplication. [provided by RefSeq, Jul 2008]

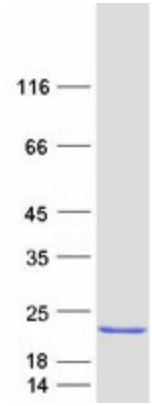
Product images:



Circular map for RC206451



Western blot validation of overexpression lysate (Cat# [LY416596]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206451 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified REG1B protein (Cat# [TP306451]). The protein was produced from HEK293T cells transfected with REG1B cDNA clone (Cat# RC206451) using MegaTran 2.0 (Cat# [TT210002]).