

Product datasheet for RC202773

PSP (REG1A) (NM_002909) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PSP (REG1A) (NM_002909) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: REG1 alpha
Synonyms: ICRF; P19; PSP; PSPS; PSPS1; PTP; REG
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202773 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCTCAGACCAGCTCATACTTCATGCTGATCTCCTGCCTGATGTTTCTGTCTCAGAGCCAAGGCCAAG
 AGGCCAGACAGAGTTGCCCCAGGCCGGATCAGCTGCCAGAAGGCACCAATGCCTATCGCTCCTACTG
 CTACTACTTTAATGAAGACCGTGAGACCTGGGTTGATGCAGATCTCTATTGCCAGAACATGAATTCGGGC
 AACCTGGTGTCTGTGCTACCCAGGCCGAGGGTGCCTTTGTGGCCTCACTGATTAAGGAGAGTGGCACTG
 ATGACTTCAATGTCTGGATTGGCTCCATGACCCAAAAAGAACC GCCGCTGGCACTGGAGCAGTGGGTC
 CCTGGTCTCTACAAGTCTGGGCATTGGAGCCCAAGCAGTGTAAATCCTGGCTACTGTGTGAGCCTG
 ACCTCAAGCACAGGATCCAGAAATGGAAGGATGTGCCTTGTGAAGACAAGTTCTCCTTTGTCTGCAAGT
 TCAAAAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202773 protein sequence
 Red=Cloning site Green=Tags(s)

MAQTSSYFMLISCLMFLSQSQGQEAQTELPQARISCEPNTNAYRSYCYFFNEDRETWVDADLYCQNMSG
 NLVSVLTQAEGAFVASL IKESGTDDFNVWIGLHDPKKNRRWHWSSGSLVSYKSWGIGAPSSVNPYCVSL
 TSSTGFQKWKDVPCEDKFSFVCKFKN

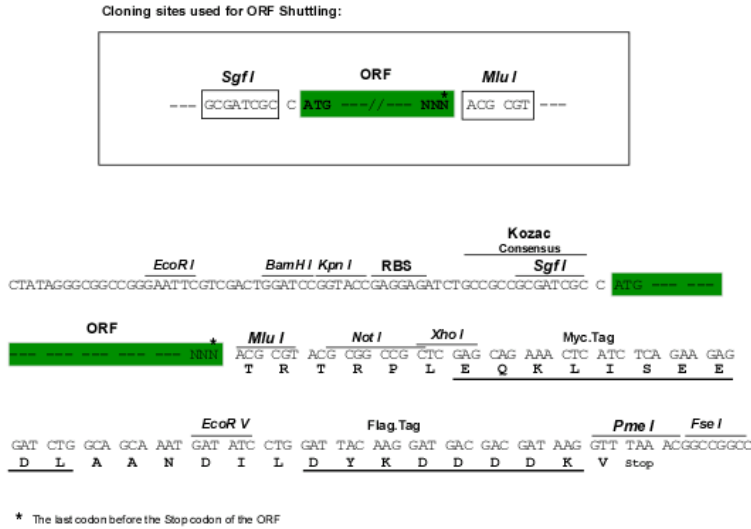
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6145_d07.zip



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002909

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.

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

RefSeq: [NM_002909.5](#)

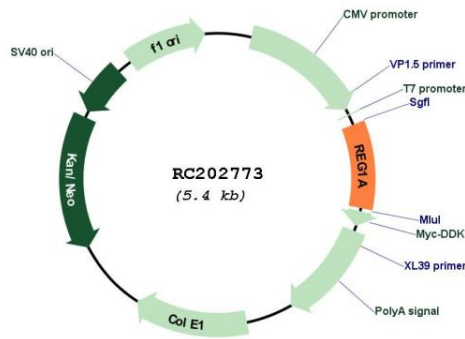
RefSeq Size: 821 bp

RefSeq ORF: 501 bp

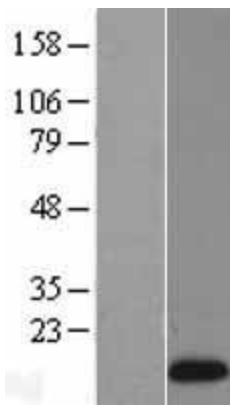
Locus ID: 5967
UniProt ID: [P05451](#)
Cytogenetics: 2p12
MW: 18.7 kDa

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 that is secreted by the exocrine pancreas. It is associated with islet cell regeneration and diabetogenesis and may be involved in pancreatic lithogenesis. Reg family members REG1B, 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]

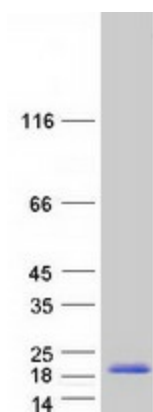
Product images:



Circular map for RC202773



Western blot validation of overexpression lysate (Cat# [LY401018]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202773 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified REG1A protein (Cat# [TP302773]). The protein was produced from HEK293T cells transfected with REG1A cDNA clone (Cat# RC202773) using MegaTran 2.0 (Cat# [TT210002]).