

Product datasheet for **RC221661**

PSG4 (NM_213633) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSG4 (NM_213633) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSG4
Synonyms:	PSBG-4; PSBG-9; PSG9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221661 representing NM_213633 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGGGCCCTCTCAGCCCTCCCTGCACACAGCGCATCACCTGGAAGGGGGTCTGCTCACAGCATCAC
TTTTAACTTCTGGAATCCGCCACAACAGCCCAAGTACGATTGAAGCCAGCCACCCAAAGTTTCTGA
GGGAAGGATGTTCTTCTACTTGTCCACAATTTGCCCCAGAATCTTGCTGGCTACATTTGGTACAAAGG
CAAATGACATACCTCTACCATTACATTACATCATATGTAGTAGACGGTCAAAGAATTATATATGGGCCTG
CATACAGTGAAGAGAAAGAGTATATTCCAATGCATCCCTGCTGATCCAGAATGTCACGCAGGAGGATGC
AGGATCCTACACCTTACACATCATAAAGCGACGGATGGGACTGGAGGAGTAACTGGACATTTACCTTC
ACCTTACACCTGGAGACTCCCAAGCCCTCCATCTCCAGCAGCAACTTAAATCCCAGGGAGGCCATGGAGG
CTGTGATCTTAACCTGTGATCCTGCGACTCCAGCCGAAGCTACCAAGTGGTGAATGGTCAGAGCCT
CCCTATGACTCACAGGTTGCAGCTGTCCAAAACCAACAGGACCCTCTTTATTTGGTGTCAAAAGTAT
ATTGCAGGACCCTATGAATGTGAAATACGGAACCCAGTGAAGTCCAGCCGAGTGACCCAGTCACCTGA
ATCTCCTCATGGTCCAGACCTCCCAGCATTTACCCTTATTACCTATTACCGTTCAGGAGAAAACCT
CTACTTGTCTGCTTCGCCGAGTCTAACCACGGGCACAATATTCTTGGACAATTAATGGGAAGTTTCAG
CTATCAGGACAAAAGCTCTATCCCCAAATAACTACAAGCATAGTGGGCTCTATGCTTGCTCTGTTC
GTAACCTCAGCCACTGGCAAGGAAAGCTCCAATCCATCACAGTCAAAGTCTCTGACTGGATATTACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221661 representing NM_213633
Red=Cloning site Green=Tags(s)

MGPLSAPPCTQRITWKGVLLTASLLNFWNPPTTAQVTIEAQP PKVSEGKDVLLL VHNLPQNLAGYIWKYK
 QMTYL YHYITSYVVDGQRIIYGPAYSGRERVYSNASLLIQNVTQEDAGSYTLHI IKRRDGTGGVTGHFTF
 TLHLETPKPSISSNLPREAMEAVIL TCDPATPAASYQWMNGQSLPMTHRLQLSKTNRTLFIFGVTKY
 IAGPYECEIRNPVSASRSDPVTLLNLLHGPDLPSIYPSFTYYRSGENLYLSCFAESNPRAQYSWTINGKFQ
 LSGQKLSIPQITTKHSGLYACSVRNSATGKESSKSITVKVSDWILP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8014_d10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_213633

ORF Size: 978 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_213633.3](#)

RefSeq Size: 1780 bp

RefSeq ORF: 981 bp

Locus ID: 5672

UniProt ID: [Q00888](#)

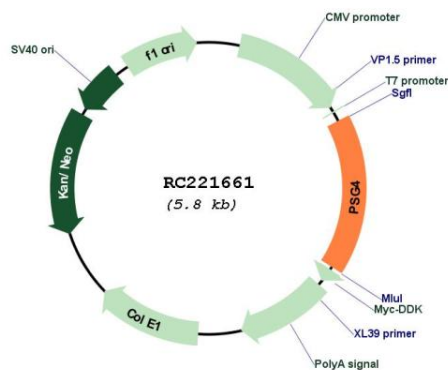
Cytogenetics: 19q13.31

Protein Families: Secreted Protein

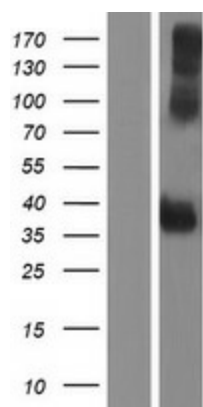
MW: 36.1 kDa

Gene Summary: The protein encoded by this gene is a pregnancy-specific glycoprotein (PSG), one of several encoded by a cluster of similar genes on chromosome 19. This gene is a member of the carcinoembryonic antigen (CEA) gene family and may play a role in regulation of the innate immune system. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]

Product images:



Circular map for RC221661



Western blot validation of overexpression lysate (Cat# [LY403872]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221661 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).