OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC204743

PSG2 (NM_031246) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSG2 (NM_031246) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSG2
Synonyms:	CEA; PSBG2; PSG1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204743 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCCCCTCTCAGCCCCTCCCTGCACAGAGCACATCAAATGGAAGGGGCTCCTGCTCACAGCATCAC
TTTTAAACTTCTGGAACCTGCCCACCACTGCCCAAGTCACGATTGAAGCCCAGCCACCAAAAGTTTCCGA
GGGGAAGGATGTTCTTCTACTTGTCCACAATTTGCCCCAGAATCTTACTGGCTACATCTGGTACAAAGGG
CAAATCAGGGACCTCTACCATTACATTACATCATATGTAGTAGACGGTCAAATAATTATATATGGGCCTG
CATATAGTGGACGAGAAACAGCATATTCCAATGCATCCCTGCTGATCCAGAATGTCACCCGGGAGGACGC
AGGATCCTACACCTTACACATCATAAAGCGAGGTGATGGGACTAGAGGAGTAACTGGATATTTCACCTTC
ACCTTATACCTGGAGACTCCCAAGCCCTCCATCTCCAGCAGCAACTTAAACCCCAGGGAGGCCATGGAAA
CTGTGATCTTAACCTGTGATCCTGAGACTCCGGACACAAGCTACCAGTGGTGGATGAATGGTCAGAGCCT
CCCTATGACTCACAGGTTTCAGCTGTCCGAAACCAACAGGACCCTCTTTCTATTTGGTGTCACAAAGTAT
ACTGCAGGACCCTATGAATGTGAAATACGGAACTCAGGGAGTGCCAGCCGCAGTGACCCAGTCACCCTGA
ATCTCCTCCATGGTCCAGACCTCCCCAGAATTCACCCTTCATACACCAATTACCGTTCAGGAGATAACCT
CTACTTGTCTTGCTTCGCGAACTCTAACCCACCGGCACAGTATTCTTGGACAATTAATGGGAAGTTTCAG
CAATCAGGACAAAATCTGTTTATCCCCCAAATTACTACAAAGCATAGCGGGCTCTATGTTTGCTCTGTTC
GTAACTCAGCCACTGGCGAGGAAAGCTCCACGTCGTTGACAGTCAAAGTCTCTGCTTCTACAAGAATAGG
ACTTCTTCCTCTCCTTAATCCAACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC204743 protein sequence
Red=Cloning site Green=Tags(s)

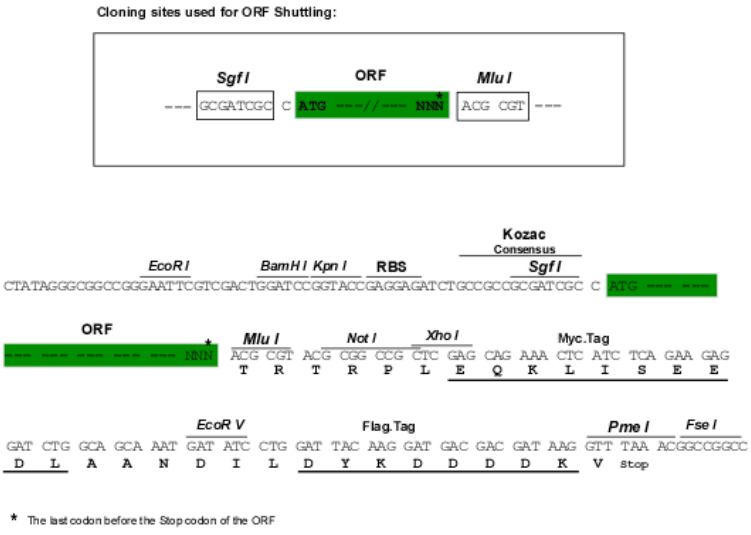
MGPLSAPPCTEHIKWKGLLLTASLLNFWNLPTTAQVTIEAQPPKVSEGKDVLLLVHNLPQNLTGYIWYKG
QIRDLYHYITSYVVDGQIIIYGPAYSGRETAYSNASLLIQNVTREDAGSYTLHIIKRGDGTRGVTGYFTF
TLYLETPKPSISSSNLNPREAMETVILTCDPETPDTSYQWWMNGQSLPMTHRFQLSETNRTLFLFGVTKY
TAGPYECEIRNSGSASRSDPVTLNLLHGPDLPRIHPSYTNYRSGDNLYLSCFANSNPPAQYSWTINGKFQ
QSGQNLFIPQITTKHSGLYVCSVRNSATGEEESSTSLTVKVSASTRIGLLPLLNPT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6551_b06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031246

ORF Size: 1005 bp

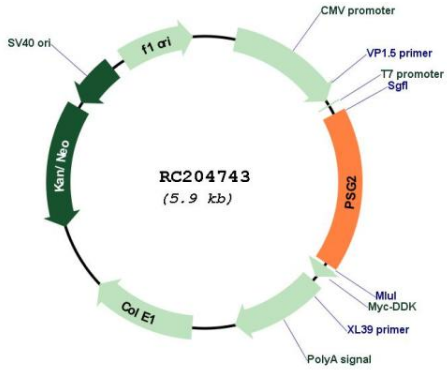
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

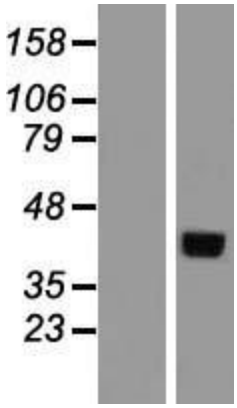
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_031246.4
RefSeq Size:	1612 bp
RefSeq ORF:	1008 bp
Locus ID:	5670
UniProt ID:	P11465
Cytogenetics:	19q13.31
Domains:	ig, IGc2, IG
Protein Families:	Secreted Protein
MW:	37.2 kDa
Gene Summary:	The human pregnancy-specific glycoproteins (PSGs) are a family of proteins that are synthesized in large amounts by placental trophoblasts and released into the maternal circulation during pregnancy. Molecular cloning and analysis of several PSG genes has indicated that the PSGs form a subgroup of the carcinoembryonic antigen (CEA) gene family, which belongs to the immunoglobulin superfamily of genes. Members of the CEA family consist of a single N domain, with structural similarity to the immunoglobulin variable domains, followed by a variable number of immunoglobulin constant-like A and/or B domains. Most PSGs have an arg-gly-asp (RGD) motif, which has been shown to function as an adhesion recognition signal for several integrins, in the N-terminal domain (summary by Teglund et al., 1994 [PubMed 7851896]). For additional general information about the PSG gene family, see PSG1 (MIM 176390).[supplied by OMIM, Oct 2009]

Product images:



Circular map for RC204743



Western blot validation of overexpression lysate (Cat# [LY410601]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204743 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).