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Product datasheet for RC207089

OSGEP (NM_017807) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OSGEP (NM_017807) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OSGEP
Synonyms:	GAMOS3; GCPL1; KAE1; OSGEP1; PRSMG1; TCS3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC207089 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGGCGGTGCTGGGTTTTGAAGGCAGCGCCAATAAGATTGGCGTGGGCGTGGTGCGGGATGGCAAGG
TGCTGGCGAACCCGCGGCGGACTTACGTCACGCCTCCTGGCACAGGATTCCTTCCAGGTGATACAGCCAG
GCATCACCGAGCTGTTATCCTAGACCTGCTGCAGGAGGCACTAACAGAGTCTGGATTAACCTCCCAGGAT
ATCGACTGCATTGCATACACCAAGGGCCCTGGCATGGGTGCCCCACTGGTTTCTGTGGCTGTTGTGGCCC
GTACTGTGGCCCAACTGTGGAATAAGCCATTGGTGGGTGTGAACCACTGTATAGGCCACATTGAGATGGG
CCGCCTCATCACTGGAGCCACCAGCCCAACCGTGTTGTATGTGAGTGGAGGAAATACGCAGGTGATTGCA
TACTCGGAACATCGTTACCGTATCTTTGGGGAAACCATCGATATTGCAGTGGGTAATTGTCTGGATCGTT
TTGCTCGAGTGCTGAAGATTTCTAACGACCCAAGTCCAGGATACAACATTGAACAGATGGCAAAGCGAGG
CAAGAAGCTAGTTGAGCTGCCATACACTGTAAAGGGGATGGACGTCTCATTCTCAGGGATCCTGTCTTTC
ATTGAGGATGTAGCCCATCGGATGCTGGCCACAGGCGAGTGTACTCCTGAGGATCTGTGTTTCTCCCTGC
AGGAAACTGTGTTTGCAATGCTGGTAGAGATCACAGAGCGAGCCATGGCACATTGTGGCTCCCAGGAGGC
CCTCATTGTGGGAGGAGTGGGGTGTAATGTGAGGCTACAGGAGATGATGGCAACAATGTGCCAGGAACGT
GGAGCCCGGCTTTTTGCTACAGATGAGAGATTCTGTATTGACAATGGAGCGATGATAGCCCAGGCTGGCT
GGGAGATGTTTCGGGCTGGACACAGGACCCCACTCAGTGATTCTGGGGTTACACAGAGGTATCGGACAGA
TGAAGTAGAGGTGACCTGGAGGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC207089 protein sequence
Red=Cloning site Green=Tags(s)

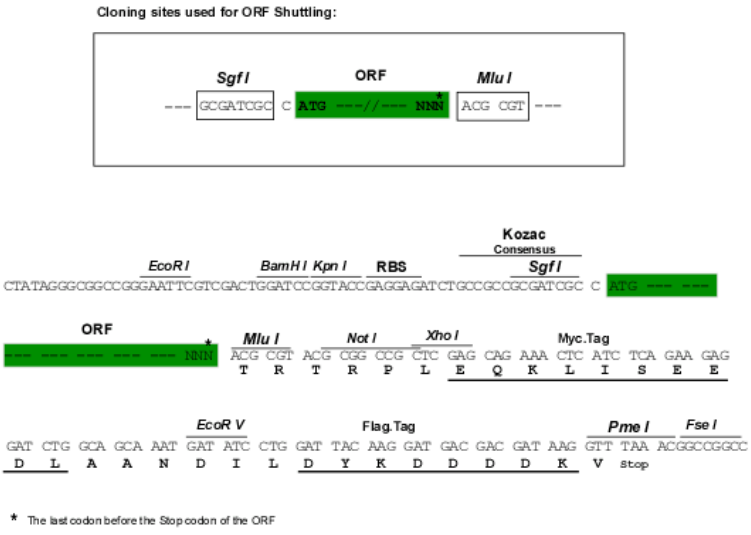
MPAVLGFEGSANKIGVGVVRDGKVLANPRRTYVTPPGTGFLPGDTARHHRAVILDLLQEALTESGLTSQD
IDCIAYTKGPGMGAPLVSVAVVARTVAQLWNKPLVGVNHCIGHIEMGRLITGATSPTVLYVSGGNTQVIA
YSEHRYRIFGETIDIAVGNCLDRFARVLKISNDPSPGYNIEQMAKRGKKLVELPYTVKGMDVSFSGILSF
IEDVAHRMLATGECTPEDLCFSLQETVFAMLVEITERAMAHCGSQEALIVGGVGCNVRLQEMMATMCQER
GARLFATDERFCIDNGAMIAQAGWEMFRAGHRTPLSDSGVTQRYRTDEVEVTWRD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6136_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017807

ORF Size: 1005 bp

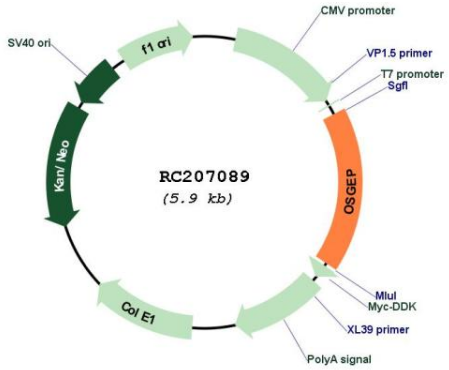
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

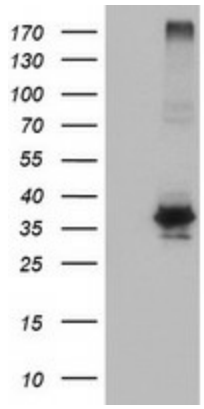
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_017807.4
RefSeq Size:	1642 bp
RefSeq ORF:	1008 bp
Locus ID:	55644
UniProt ID:	Q9NPF4
Cytogenetics:	14q11.2
Domains:	Peptidase_M22
Protein Families:	Druggable Genome, Protease
MW:	36.4 kDa
Gene Summary:	Component of the EKC/KEOPS complex that is required for the formation of a threonylcarbamoyl group on adenosine at position 37 (t(6)A37) in tRNAs that read codons beginning with adenine. The complex is probably involved in the transfer of the threonylcarbamoyl moiety of threonylcarbamoyl-AMP (TC-AMP) to the N6 group of A37. OSGEP likely plays a direct catalytic role in this reaction, but requires other protein(s) of the complex to fulfill this activity.[UniProtKB/Swiss-Prot Function]

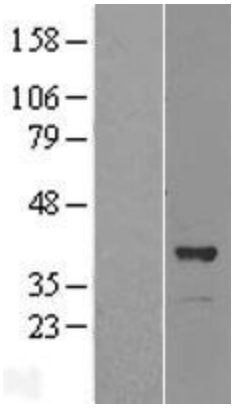
Product images:



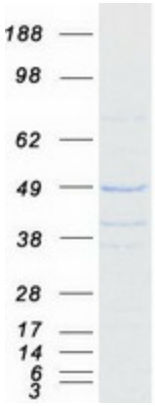
Circular map for RC207089



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY OSGEP (Cat# RC207089, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-OSGEP(Cat# [TA503002]). Positive lysates [LY402616] (100ug) and [LC402616] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402616]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207089 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified OSGEP protein (Cat# [TP307089]). The protein was produced from HEK293T cells transfected with OSGEP cDNA clone (Cat# RC207089) using MegaTran 2.0 (Cat# [TT210002]).