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Product datasheet for MR218778

Pask (NM_080850) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pask (NM_080850) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pask
Synonyms:	mKIAA0135
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR218778 representing NM_080850
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

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GAGGATGGTGAGCAGTCATTGCTCACAGACCAGCAAAGCATTCCAAAGAGAAACCTGCCAGCCCATGGTG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>MR218778 representing NM_080850
Red=Cloning site Green=Tags(s)

MEDRGPPVFAEDWKCLSESPPVQEGPAAQATFEPSKPLSIAHKHLSRKNGLSRLCQSRMALSEDRWSSYC
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SATLFCCWLVKDLFHSHRDSATRTRLFLASLPSSTHSMPELSGSSFGEVLRAKPWFEESPTPAELEGLAA
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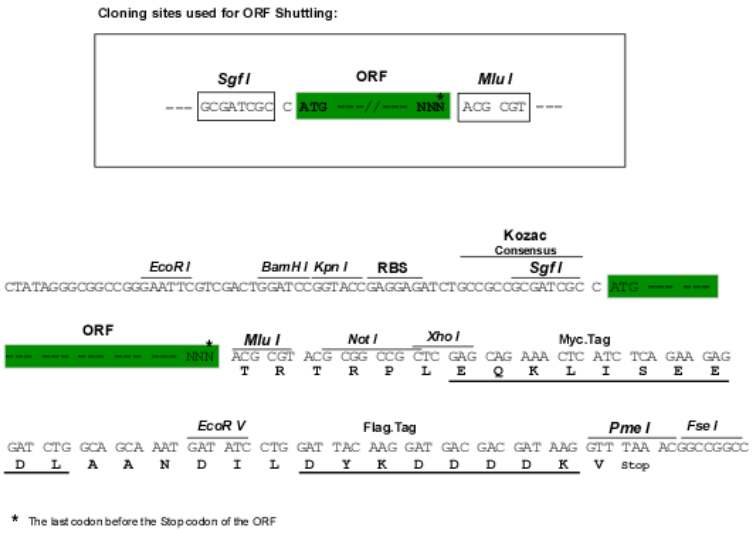
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9008_h05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

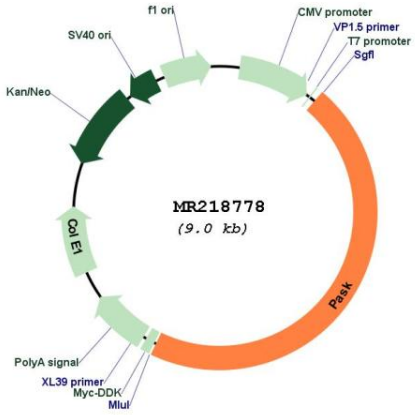


ACCN: NM_080850

ORF Size: 4149 bp

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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_080850.2, NP_543126.2
RefSeq Size:	5119 bp
RefSeq ORF:	4152 bp
Locus ID:	269224
UniProt ID:	Q8CEE6
Cytogenetics:	1 D
MW:	151.7 kDa
Gene Summary:	Serine/threonine-protein kinase involved in energy homeostasis and protein translation. Phosphorylates EEF1A1, GYS1, PDX1 and RPS6. Probably plays a role under changing environmental conditions (oxygen, glucose, nutrition), rather than under standard conditions. Acts as a sensor involved in energy homeostasis: regulates glycogen synthase synthesis by mediating phosphorylation of GYS1, leading to GYS1 inactivation. May be involved in glucose-stimulated insulin production in pancreas and regulation of glucagon secretion by glucose in alpha cells; however such data require additional evidences. May play a role in regulation of protein translation by phosphorylating EEF1A1, leading to increase translation efficiency. May also participate to respiratory regulation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218778