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Product datasheet for MR218929

Pak7 (NM_172858) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pak7 (NM_172858) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pak7
Synonyms:	2900083L08Rik; 6430627N20; PAK-5; PAK-7; Pak5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>MR218929 representing NM_172858
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTTGGGAAGAAAAAGAAAAAGATCGAAATATCTGGCCCATCCAACTTTGAACACAGGGTTCATACTG
GATTTGATCCACAAGAGCAGAAGTTTACTGGCCTTCCCCAGCAGTGGCACAGCCTGTTAGCAGACACAGC
CAACAGGCCCAAGCCCATGGTGGACCCATCATGCATCACACCCATACAGCTGGCTCCCATGAAGACAATC
GTCAGAGGAAATAAATCCTGCAAGGAAACCTCTATCAATGGTCTGCTAGAGGATTTTGACAACATCTCCG
TGACTCGCTCCAACTCTCTAAGGAAAGAAAGCCCACCCACCCCAGATCAGGGAGCAGCTAGCCGCATTCA
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CCCAGAGGCCCCACCAAACTACCTCAAAGTCAAAGCAAAGCAGGCTACTCTTCAGGCAGCCACCAGTACC
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CGCTTCTTACTTAAGCTCTCTCAGTATCTCCTCGAGCACCTACCCTCCACCTAGCTGGGGCTCCTCCTCA
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AGATCTTATGTTGGTGAGGGAGCCCTCTCAAAGAGCCACAGCTCAAGAACTCCTTGGACATCCATTCTTA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR218929 representing NM_172858
Red=Cloning site Green=Tags(s)

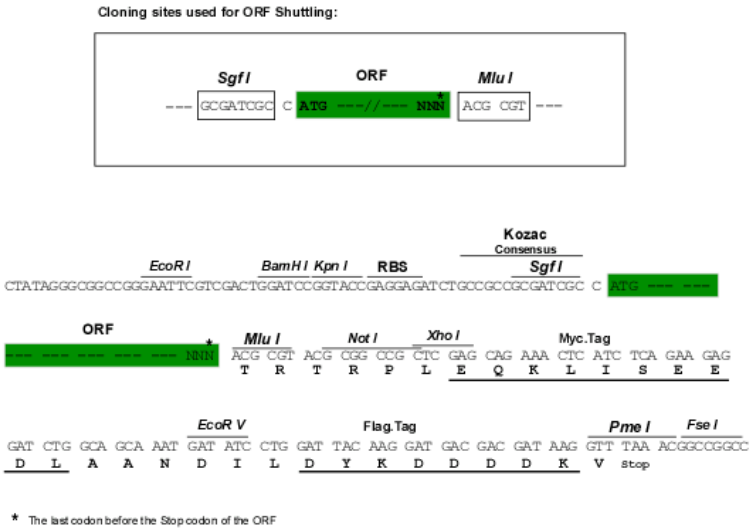
MFGKKKKKIEISGPSNFEHRVHTGFDPQEQKFTGLPQQWHSLLADTANRPKPMVDPSCITPIQLAPMKTI
VRGNKSCKETSINGLLEDFDNISVTRSNSLRKESPPTPDQGAASRIQGHSEENGFITFSQYSSESDTTAD
YTTEKYRDRSLYGDDLDLYYKSSHAAKQNGHAMKMKHGDAYYPEMKSLKTDLAGFPVDYHTHLDSLRKSS
EYGDLRWDYQRASSSSPLDYSFQLTPSRTAGTSRCSKESLAYSESDWGPSLDDYDRRPKSSYLHQTSPQP
AMRQRSKSGSGLQEPMMPFGASAFKTHPQGHSYNSYTYPRLSEPTMCIPKVDYDRAQMVFSPPLSGSDTY
PRGPTKLPQSQSKAGYSSGSHQYPSGYHKASLYHHPSLQTSSQYISTASYLSSLSISSSTYPPPSWGSSS
DQQPSRVSHEQFRAALQLVVSPGDPREYLDNFIKIGEGSTGIVCIATEKHTGKQVAVKKMDLRKQQRREL
LFNEVVIMRDYHHDNVVDMYNSYLVGDELWVVMEFLEGGALTDIVTHTRMNEEQIATVCLSVLKALSYLH
NQGVIHRDIKSDSILLTSDGRIKLSDFGFCAQVSKEVPKRKSLVGTPYWMAPEVISRLPYGTEVDIWSLG
IMVIEMIDGEPPYFNEPPLQAMRRIRDSLPPRVKDLHKVSSMLRGFLDLMLVREPSQRATAQELLGHPFL
KLAGPPSCIVPLMRQYRHH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9009_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172858

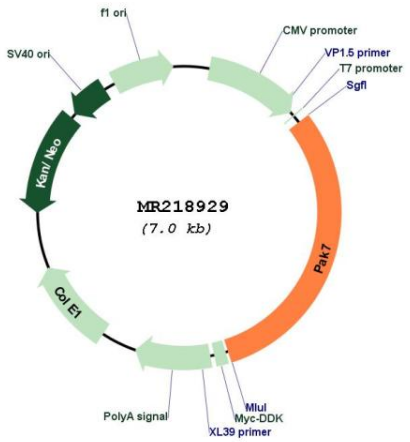
ORF Size: 2157 bp

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_172858.2, NP_766446.2
RefSeq Size:	4773 bp
RefSeq ORF:	2160 bp
Locus ID:	241656
UniProt ID:	Q8C015
Cytogenetics:	2 F3
MW:	81.4 kDa
Gene Summary:	Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, proliferation or cell survival. Activation by various effectors including growth factor receptors or active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates the proto-oncogene RAF1 and stimulates its kinase activity. Promotes cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Phosphorylates CTNND1, probably to regulate cytoskeletal organization and cell morphology. Keeps microtubules stable through MARK2 inhibition and destabilizes the F-actin network leading to the disappearance of stress fibers and focal adhesions (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218929