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Product datasheet for MC219418

Pak4 (NM_027470) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pak4 (NM_027470) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pak4
Synonyms:	5730488L07Rik; AW555722; mKIAA1142
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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Fully Sequenced ORF:

>MC219418 representing NM_027470
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTTGGAAAGAAGAAGAAGCGGGTGGAGATCTCAGCCCCATCCAACTTCGAGCACCGTGTACACACAG
GCTTTGATCAGCATGAGCAGAAGTTCACAGGGCTGCCCCGCCAGTGGCAGAGCCTGATTGAGGAATCAGC
ACGCAGACCCAAGCCCCTGATCGACCCTGCCTGCATCACGTCCATCCAGCCTGGAGCCCCCAAGACCATC
GTTCGGGGCAGCAAAGGTGCCAAGGATGGGGCTCTCACTCTGCTGCTTGACGAATTTGAGAACATGTCGG
TGACGCGCTCCAACTCCCTACGCAGAGAGAGTCCACCACCACCTGCCCGTGCCCACCAGGAGAATGGAAT
GCTGGAGGAGCGGGCAGCCCCGGCCAGAATGGCCCCTGACAAAGCTGGAAGCAGAGCCCGGGCCACAGGC
CACAGTGAGGCAGGCAGTGGCAGTGGTGACAGACGGCGGGTGGGGCCAGAGAAAAGGCCCAAATCTTCGA
GGGATGGTCCAGGAGGACCCCAGGAGGCCTCCCGCGATAAGCGCCCACTCTCTGGGCCTGATGTCAGCAC
TCCTCAGCCTGGCAGTCTGACCAGCGGGACAAAACTAGCAGCTGGCAGGCCCTTTAACACATACCCACGG
GCTGACACGGACCACCCACCCCGCGGTGCCCAGGGGGAGCCACATACCATGGCCCCTAATGGGCCTTCAG
CCACAGGCCTGGCCGCTCCTCAGTCTTCCTCCTCCTCCCGGCCTCCCACCCGAGCCCGTGGTGCTCCCAG
CCCAGGAGTTCTGGGTCCCCATGCCTCTGAGCCCCAGTTGGCCCCCCCAGCACGTGCCCTTGCTGCCCCT
GCTGTACCTCCTGCCCCTGGGCCCCCTGGGCCTCGCTCACCACAGCGGGAGCCCCAACGAGTGTCCCATG
AGCAGTTCCGGGCTGCCCTGCAGCTGGTGGTGGACCCAGGGGACCCTCGTTCCTATCTAGACAACTTCAT
CAAGATTGGTGAGGGCTCTACAGGTATTGTGTGCATTGCCACTGTACGCAGCTCAGGCAAACTGGTGGCC
GTCAAGAAGATGGACTTGCGCAAGCAGCAAAGACGTGAACTGCTCTTCAATGAGGTGGTGATCATGCGGG
ACTACCGGCACGAGAACGTGGTGGAGATGTACAACAGCTACCTGGTGGGTGACGAACTCTGGGTCGTCAT
GGAGTTCCTGGAAGGCGGCGCCCTCACGGATATTGTCACCCACACCAGGATGAACGAGGAACAGATCGCC
GCCGTGTGCCTGGCTGTGCTTCAGGCGCTGGCTGTGCTCCACGCCCAGGGTGTCATCCACCGTGACATCA
AGAGTGACTCTATCTTGCTGACCCATGATGGCCGGGTGAAGCTGTCCGACTTCGGGTTTTGTGCCCAGGT
GAGCAAGGAGGTGCCTCGGAGGAAGTCGCTGGTGGGCACCCCGTATTGGATGGCCCCGGAGCTCATCTCC
CGCCTTCCCTATGGGCCAGAGGTGGATATCTGGTCACTGGGGGTGATGGTGATCGAGATGGTGGATGGGG
AGCCCCCTTACTTCAACGAGCCACCCCTCAAAGCTATGAAGATGATCCGGGACAACCTCCCGCCCCGACT
GAAGAACCTGCACAAGGCGTCACCGTCTCTGAAAGGCTTCTTGGATCGCCTGCTAGTGCGGGACCCGGCC
CAGCGGGCCACTGCTGCCGAGCTGCTGAAGCACCCGTTCCTCACCAAGGCGGGGCCACCAGCCAGCATCG
TGCCCCTGATGCGCCAGCACCGAACCAGATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_027470

Insert Size: 1782 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_027470.3, NP_081746.1
RefSeq Size:	2898 bp
RefSeq ORF:	1782 bp
Locus ID:	70584
UniProt ID:	Q8BTW9
Cytogenetics:	7 B1
Gene Summary:	Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, growth, 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 and inactivates the protein phosphatase SSH1, leading to increased inhibitory phosphorylation of the actin binding/depolymerizing factor cofilin. Decreased cofilin activity may lead to stabilization of actin filaments. Phosphorylates LIMK1, a kinase that also inhibits the activity of cofilin. Phosphorylates integrin beta5/ITGB5 and thus regulates cell motility. Phosphorylates ARHGEF2 and activates the downstream target RHOA that plays a role in the regulation of assembly of focal adhesions and actin stress fibers. Stimulates cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Alternatively, inhibits apoptosis by preventing caspase-8 binding to death domain receptors in a kinase independent manner. Plays a role in cell-cycle progression by controlling levels of the cell-cycle regulatory protein CDKN1A and by phosphorylating RAN.[UniProtKB/Swiss-Prot Function]