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Product datasheet for RC203074

PAK1 interacting protein 1 (PAK1IP1) (NM_017906) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Tag: Myc-DDK

Symbol: PAK1 interacting protein 1

Synonyms: bA421M1.5; hPIP1; MAK11; PIP1; WDR84

Mammalian Cell Selection: Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC203074 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCTGGTCGCTGGTTGCTACGAGCAGGTCCTCTTTGGGTTCGCTGTACACCCGGAGCCCGAGGCTT
GCGGCGACCACGAGCAATGGACTCTTGTGGCTGACTTCACTCACCATGCTCACACTGCCTCCTTGTCAGC
AGTAGCTGTAAATAGTCGTTTTGTGGTCACTGGGAGCAAAGATGAAACAATTCACATTTATGACATGAAA
AAGAAGATTGAGCATGGGGCTCTAGTGCATCACAGTGGTACAATAACTTGCCTGAAATTCTATGGCAACA
GGCATTTAATCAGTGGAGCGGAAGATGGACTCATCTGTATCTGGGATGCAAAGAAATGGGAATGCCTGAA
GTCAATTAAAGCTCACAAAGGACAGGTGACCTTCCTTTCTATTCACCCATCTGGCAAGTTGGCCCTGTCG
GTTGGTACAGATAAAACTTTAAGAACGTGGAATCTTGTAGAAGGAAGATCAGCATTCATAAAAAATATAA
AACAAAATGCTCACATAGTAGAATGGTCCCCAAGAGGAGAGCAGTATGTAGTTATCATACAGAATAAAAT
AGACATCTATCAGCTTGACACTGCATCCATTAGTGGCACCGTCACAAATGAAAAGAGAATTTCCTCTGTT
AAATTTCTTTCAGAGTCTGTCCTTGCAGTGGCTGGAGATGAAGAAGTTATAAGGTTTTTTGACTGTGATT
CACTAGTGTGCCTCTGCGAATTTAAAGCTCATGAAAACAGGGTAAAGGACATGTTCAGTTTTGAAATTCC
AGAGCATCATGTTATTGTTTCAGCATCGAGTGATGGTTTCATCAAAATGTGGAAGCTTGAGCAGGATAAG
AAAGTTCCCCCATCTTTACTCTGTGAAATAAACACTAATGCCAGGCTGACGTGTCTTGGAGTGTGGCTAG
ACAAAGTGGCAGACATGAAAGAAAGCCTTCCTCCAGCTGCAGAGCCTTCTCCTGTAAGTAAAGAACAGTC
CAAAATTGGCAAAAAGGAGCCTGGTGACACAGTGCACAAAGAAGAAAAGCGGTCAAAACCTAACACAAAG
AAACGCGGTTTAACAGGTGACAGTAAGAAAGCAACAAAAGAAAGTGGCCTGATATCAACCAAGAAGAGGA
AAATGGTAGAAATGTTGGAAAAGAAGAGGAAAAAGAAGAAAATAAAAACAATGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC203074 protein sequence
Red=Cloning site Green=Tags(s)

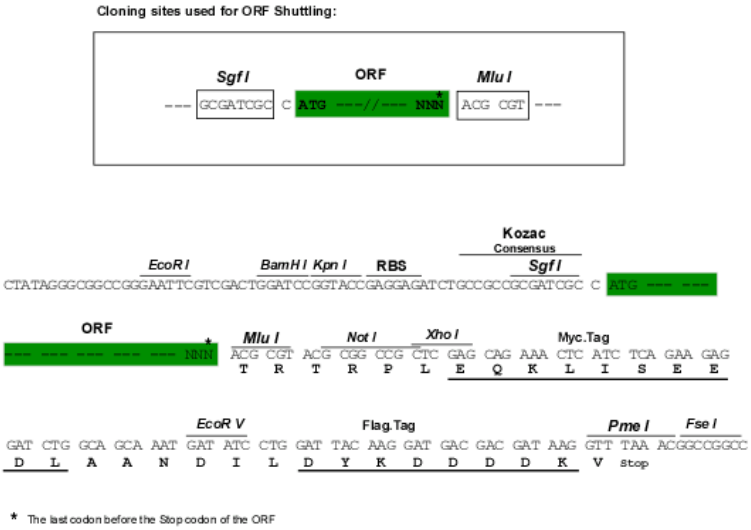
MELVAGCYEQVLFGFAVHPEPEACGDHEQWTLVADFTHHAHTASLSAVAVNSRFVVTGSKDETIHIYDMK
KKIEHGALVHHSGTITCLKFYGNRHLISGAEDGLICIWDAKKWECLKSIKAHKGQVTFLSIHPSGKLALS
VGTDKTLRTWNLVEGRSAFIKNIKQNAHIVEWSPRGEQYVVIIQNKIDIYQLDTASISGTVTNEKRISSV
KFLSESVLAVAGDEEVIRFFDCDSLVCLCEFKAHENRVKDMFSFEIPEHHVIVSASSDGFIKMWKLEQDK
KVPPSLLCEINTNARLTCLGVWLDKVADMKESLPPAAEPSPVSKEQSKIGKKEPGDTVHKEEKRSKPNTK
KRGLTGDSKKATKESGLISTKKRKMVEMLEKKRKKKKIKTMQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6434_g06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017906

ORF Size: 1176 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_017906.3

RefSeq Size: 1511 bp

RefSeq ORF: 1179 bp

Locus ID: 55003

UniProt ID: Q9NWT1

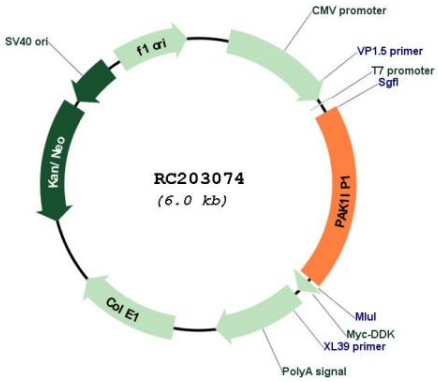
Cytogenetics: 6p24.2

Domains: WD40

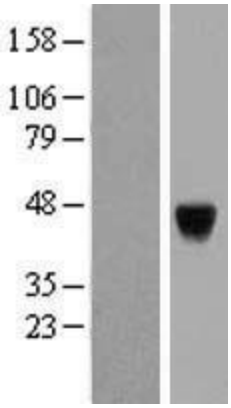
MW: 44 kDa

Gene Summary: Negatively regulates the PAK1 kinase. PAK1 is a member of the PAK kinase family, which has been shown to play a positive role in the regulation of signaling pathways involving MAPK8 and RELA. PAK1 exists as an inactive homodimer, which is activated by binding of small GTPases such as CDC42 to an N-terminal regulatory domain. PAK1IP1 also binds to the N-terminus of PAK1, and inhibits the specific activation of PAK1 by CDC42. May be involved in ribosomal large subunit assembly (PubMed:24120868).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC203074



Western blot validation of overexpression lysate (Cat# [LY413452]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203074 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).