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Product datasheet for RC205448

KPNA4 (NM_002268) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KPNA4 (NM_002268) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KPNA4
Synonyms:	IPOA3; QIP1; SRP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205448 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGACAACGAGAAACTGGACAACCAACGGCTCAAGAATTTCAAGAACAAAGGCCGCGACTTGGAGA
CTATGAGAAGACAACGAAATGAAGTTGTAGTTGAATTAAGGAAGAATAAAAGAGATGAACATCTCTTAAA
GAGAAGGAATGTACCACATGAAGATATCTGTGAAGACTCTGATATAGATGGTGATTATAGAGTGCAAAAT
ACCTCTCTAGAAGCTATTGTTCAAAATGCTTCAAGTGATAACCAAGGAATTCAATTAAGTGCAGTTCAAG
CTGCTAGGAAGCTTTTGTCCAGTGATCGAAATCCACCAATTGATGACTTAATAAAATCTGGAATATTGCC
CATTTTAGTCCATTGTCTTGAAAGAGATGACAATCCTTCTTTACAGTTTGAAGCTGCATGGGCTTTGACA
AACATTGCATCTGGAACTTCTGAACAAACTCAAGCAGTAGTTCAGTCCAATGCTGTGCCACTTTTCCTGA
GGCTTCTCCATTCACCCCATCAGAATGTCTGTGAGCAAGCAGTGTGGGCATTGGGAAATATCATAGGTGA
TGGGCCCCAGTGTAGAGATTATGTCATAAGTCTTGGAGTTGTGAAACCTTTACTTTCCTTCATAAGTCCA
TCTATTCCTATAACATTCTTAAGAAATGTTACTTGGGTTATGGTCAACTTATGTCGCCACAAAGACCCAC
CACCACCAATGGAAACCATTCAGGAGATTCTTCCAGCCCTTTGTGTTTTAATTCATCACACAGATGTAAA
TATACTGGTAGACACAGTCTGGGCCCTCTCTTACCTTACTGATGCTGGCAATGAACAAATACAGATGGTA
ATAGACTCTGGAATAGTTCCTCATTTGGTTCCTCTGCTCAGCCACCAGGAAGTTAAAGTTCAGACTGCTG
CACTTAGAGCTGTGGGCAACATTGTTACTGGAACTGATGAGCAAACACAAGTAGTTTTGAACTGTGATGC
TCTTTCACACTTCCCAGCACTCCTGACACATCCCAAAGAGAAAATTAATAAAGAAGCAGTGTGGTTCCTC
TCCAACATCACTGCAGGAAATCAGCAGCAGGTACAGGCAGTAATTGATGCCAATCTTGTACCAATGATAA
TACACCTTTTGGATAAGGGGGATTTTGGCACTCAAAAAGAAGCTGCTTGGGCCATAAGTAACTTAACAAT
TAGTGGAAGGAAAGATCAAGTGGCTTACCTTATCCAACAAAATGTTATCCCACCTTTTTGCAACTTGCTG
ACTGTAAAAGATGCACAAGTTGTGCAAGTAGTACTCGATGGACTAAGTAATATATTAAAAATGGCTGAAG
ATGAGGCAGAAACCATAGGCAATCTTATAGAAGAATGTGGAGGGCTGGAGAAAATTGAACAACTTCAAAA
TCATGAAAATGAAGACATCTACAAATTGGCCTATGAGATCATTGATCAGTTCTTCTCTTCAGATGATATT
GATGAAGACCCTAGCCTTGTTCCAGAGGCAATTCAAGGCGGAACATTTGGTTTCAATTCATCTGCCAATG
TACCAACAGAAGGGTTCCAGTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205448 protein sequence
Red=Cloning site Green=Tags(s)

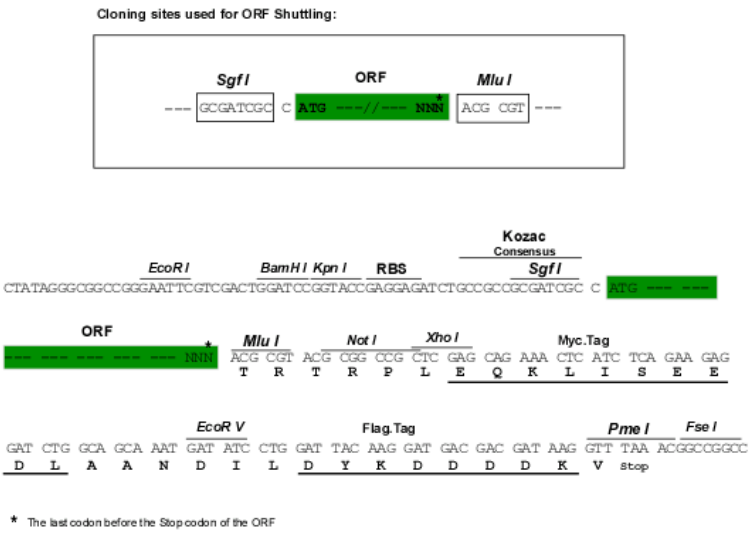
MADNEKLDNQRLKNFKNKGRDLETMRRQRNEVVVELRKNKRDEHLLKRRNVPHEDICEDSDIDGDYRVQN
TSLEAIVQNASSDNQGIQLSAVQAARKLLSSDRNPPIDDLIKSGILPILVHCLERDDNPSLQFEAAWALT
NIASGTSEQTQAVVQSNAVPLFLRLLHSPHQNVCEQAVWALGNIIGDGPQCRDYVISLGVVKPLLSFISP
SIPITFLRNVTWVMVNLCRHKDPPPPMETIQEILPALCVLIHHTDVNILVDTVWALSYLTDAGNEQIQMV
IDSGIVPHLVPLLSHQEVKVQTAALRAVGNIVTGTDEQTQVVLNCDALSHFPALLTHPKEKINKEAVWFL
SNITAGNQQQVQAVIDANLVPMIIHLLDKGDFGTQKEAAWAISNLTISGRKDQVAYLIQQNVIPPFCNLL
TVKDAQVVQVVLDGLSNILKMAEDEAETIGNLIEECGGLEKIEQLQNHENEDIYKLAYEIIDQFFSSDDI
DEDPSLVPEAIQGGTFGFNSSANVPTEGFQF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6138_c08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002268

ORF Size: 1563 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_002268.5

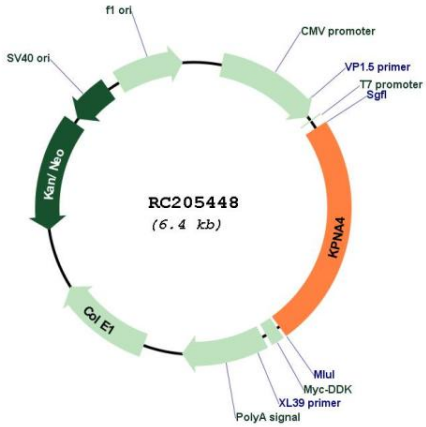
RefSeq Size: 8981 bp

RefSeq ORF: 1566 bp

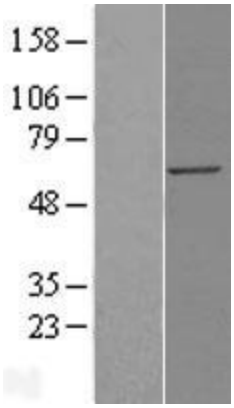
Locus ID: 3840

UniProt ID:	O00629
Cytogenetics:	3q25.33
Domains:	Armadillo_seg, IBB
MW:	57.9 kDa
Gene Summary:	The nuclear import of karyophilic proteins is directed by short amino acid sequences termed nuclear localization signals (NLSs). Karyopherins, or importins, are cytoplasmic proteins that recognize NLSs and dock NLS-containing proteins to the nuclear pore complex. The protein encoded by this gene shares the sequence similarity with Xenopus importin-alpha and Saccharomyces cerevisiae Srp1. This protein is found to interact with the NLSs of DNA helicase Q1 and SV40 T antigen. [provided by RefSeq, Jul 2008]

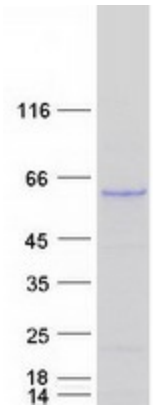
Product images:



Circular map for RC205448



Western blot validation of overexpression lysate (Cat# [LY400822]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205448 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KPNA4 protein (Cat# [TP305448]). The protein was produced from HEK293T cells transfected with KPNA4 cDNA clone (Cat# RC205448) using MegaTran 2.0 (Cat# [TT210002]).