OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC227373

KPNA7 (NM_001145715) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KPNA7 (NM_001145715) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KPNA7
Synonyms:	IPOA8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC227373 representing NM_001145715
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGACCTTAGATGCTCCAGAAGAGAGGCGGAGAAAATTTAAGTACCGAGGCAAAGATGTGTCTCTGA
GGCGACAGCAGAGGATGGCGGTCAGTCTGGAGCTCCGAAAGGCCAAGAAAGATGAACAGACCTTAAAGAG
AAGGAATATCACGAGCTTCTGCCCTGACACACCTTCTGAAAAAACAGCCAAAGGGGTGGCGGTCAGCCTC
ACTCTGGGTGAAATAATCAAAGGTGTGAATAGCTCAGATCCAGTCCTATGTTTCCAGGCCACCCAGACAG
CCAGGAAAATGCTATCCCAGGAAAAGAACCCCCCTCTGAAACTGGTCATTGAAGCGGGCCTCATTCCCAG
GATGGTGGAGTTCCTGAAGTCATCACTTTACCCCTGCTTGCAGTTTGAGGCTGCCTGGGCCCTGACCAAC
ATCGCTTCAGGGACTTCGGAGCAGACTCGTGCCGTGGTAGAAGGGGGAGCCATCCAGCCCTTGATTGAGC
TCCTGTCTTCCTCCAACGTGGCTGTGTGTGAACAGGCAGTGTGGGCTCTTGGTAATATAGCCGGTGATGG
CCCAGAGTTCAGAGATAACGTCATCACAAGCAATGCCATCCCACATCTCCTAGCCTTGATTTCACCCACC
CTGCCGATCACATTTCTGCGGAACATCACGTGGACCTTGTCGAATCTGTGCCGAAACAAGAACCCATACC
CTTGCGACACTGCGGTGAAGCAGATACTGCCGGCCCTCCTTCACCTCCTGCAGCACCAGGACAGTGAGGT
TCTCTCGGATGCCTGCTGGGCACTGTCCTACCTCACCGACGGCTCCAACAAGCGCATCGGCCAAGTGGTT
AACACGGGGGTCCTGCCCAGGCTGGTAGTGCTCATGACCAGCTCAGAACTCAATGTCTTGACTCCTTCTC
TCCGCACCGTGGGGAACATTGTCACGGGCACAGATGAGCAGACGCAGATGGCCATTGATGCGGGTATGCT
GAACGTGCTCCCCCAGCTCCTGCAACACAACAAGCCCTCCATCCAGAAGGAGGCAGCCTGGGCCCTGAGC
AACGTAGCAGCGGGGCCTTGTCACCACATCCAGCAGCTGCTTGCCTACGACGTCTTGCCTCCCTTGGTGG
CTCTGCTAAAAAACGGAGAATTTAAAGTCCAGAAAGAGGCTGTCTGGATGGTGGCGAACTTTGCAACAGG
GGCCACCATGGATCAGCTGATCCAGCTCGTCCACTCTGGGGTCCTGGAGCCACTGGTGAATCTGCTCACT
GCCCCAGATGTTAAAATTGTTCTCATCATCCTTGATGTCATCTCTTGCATCCTCCAGGCGGCAGAGAAAC
GGTCTGAGAAGGAAAACCTGTGTCTTCTGATAGAAGAACTTGGTGGGATCGATAGAATTGAGGCTTTACA
GCTGCATGAGAACCGTCAAATTGGCCAGTCGGCTTTGAACATCATCGAGAAGCACTTTGGTGAGGAAGAA
GATGAGAGCCAAACTTTACTGAGCCAAGTCATAGACCAAGATTATGAATTTATAGATTATGAATGCTTAG
CAAAAAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC227373 representing NM_001145715
Red=Cloning site Green=Tags(s)

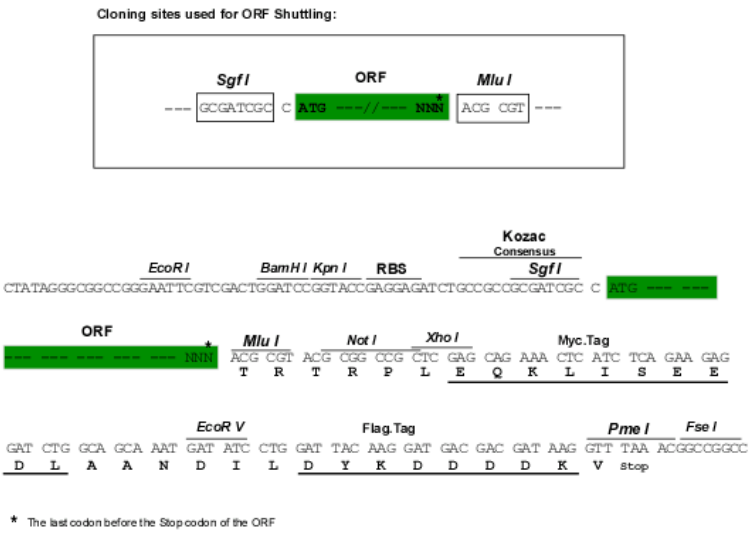
MPTLDAPEERRRKFKYRGKDVSLRRQQRMAVSLELRKAKKDEQTLKRRNITSFCPDTPSEKTAKGVAVSL
TLGEIIKGVNSSDPVLCFQATQTARKMLSQEKNPPLKLVIEAGLIPRMVEFLKSSLYPCLQFEAAWALTN
IASGTSEQTRAVVEGGAIQPLIELLSSSNVAVCEQAVWALGNIAGDGPEFRDNVITSNAIPHLLALISPT
LPITFLRNITWTLSNLCRNKNPYPCDTAVKQILPALLHLLQHQDSEVLSDACWALSYLTDGSNKRIGQVV
NTGVLPRLVVLMTSSELNVLTPSLRTVGNIVTGTDEQTQMAIDAGMLNVLPQLLQHNKPSIQKEAAWALS
NVAAGPCHHIQQLLAYDVLPPLVALLKNGEFKVQKEAVWMVANFATGATMDQLIQLVHSGVLEPLVNLLT
APDVKIVLIILDVISCILQAAEKRSEKENLCLLIEELGGIDRIEALQLHENRQIGQSALNIIEKHFGEEE
DESQTLLSQVIDQDYEFIDYECLAKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8032_d03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001145715

ORF Size: 1548 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_001145715.3

RefSeq ORF: 1551 bp

Locus ID: 402569

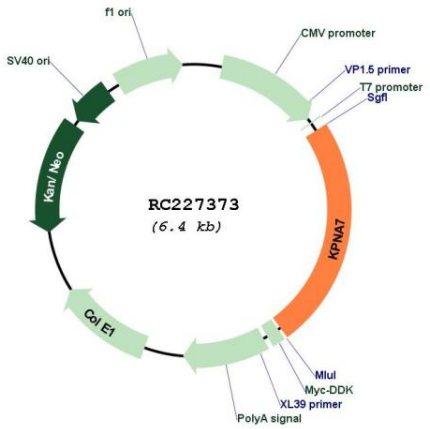
UniProt ID: A9QM74

Cytogenetics: 7q22.1

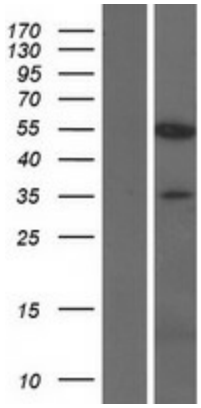
MW: 56.8 kDa

Gene Summary: The transport of molecules between the nucleus and the cytoplasm in eukaryotic cells is mediated by the nuclear pore complex (NPC), which consists of 60-100 proteins. Small molecules (up to 70 kD) can pass through the nuclear pore by nonselective diffusion while larger molecules are transported by an active process. The protein encoded by this gene belongs to the importin alpha family, and is involved in nuclear protein import, but exhibits different nuclear localization signal binding specificity compared to other members of the family. A pseudogene of this gene has been defined on chromosome 5. [provided by RefSeq, Jul 2016]

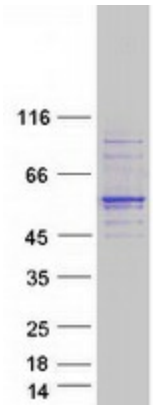
Product images:



Circular map for RC227373



Western blot validation of overexpression lysate (Cat# [LY428979]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227373 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KPNA7 protein (Cat# [TP327373]). The protein was produced from HEK293T cells transfected with KPNA7 cDNA clone (Cat# RC227373) using MegaTran 2.0 (Cat# [TT210002]).