

Product datasheet for **MG208345**

Kpna3 (NM_008466) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kpna3 (NM_008466) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Kpna3
Synonyms:	IPOA4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208345 representing NM_008466
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGAGAACCCCGCTTGGAGAACCACCGCATCAAGAGCTTCAAGAACAAGGCCGCGATGTGGAGA
 CGATGCGAAGACACAGAAATGAAGTGACAGTTGAACTCCGGAAGAACAAAAGAGACGAACACTTACTGAA
 AAAGAGAAATGTTCCCAAGAAGAAAGCTTAGAAGATTAGATGTTGATGCTGATTTTAAAGCACAAAAT
 GTAACACTAGAAGCTATATTACAGAATGCCACAAGTGATAATCCTGTAGTCCAGTTGAGTGTGTCAGG
 CAGCAAGGAACTATTATCCAGTGACAGAAATCCACCAATTGATGACCTAATAAAATCTGGGATTTTACC
 AATTCTAGTCAAATGTCTAGAAAGAGATGATAATCCTTCATTACAGTTTGAAGCTGCTTGGGCACTAACT
 AATATAGCATCGGGAACCTTGCACAGACTCAAGCTGTTGTACAGTCTAATGCAGTACCCTTTTTCTGC
 GACTCCTCCATCCACATCAGAATGTTTGTGAACAAGCGGTGTGGGCTTTGGGAAACATTATAGTGGA
 TGGTCCTCAATGTAGAGATTATGCATATCACTGGGAGTTGTCAAACCTTCTGTCTTCATCAATCCC
 TCATTCCCATCACCTTCTTCCGGAACGTACATGGGTCAATTGTCAATCTCTGCAGGAATAAAGACCCCC
 CACCGCTATGGAGACAGTTCAGGAGATTTTGCCAGCTTTGTGTGTGCTCATCTACCATACGGACATAAA
 TATTCTTGTAGACTGTTTGGGCGCTGTCACTTGCAGACGGGGAAATGAGCAATACAGATGGTT
 ATTGATTCAGGGGTTGTACCTTCTCGTACCTTCTGAGCCACCAGGAAGTCAAAGTTCAAATGCAG
 CACTCAGAGCGGTTGGGAACATAGTGACTGGCACTGATGAGCAGACCCAGGTGGTTCTCACTGTGATGT
 CCTGTCCCACTTCCAAACCTTGTGCACCCAAAAGAGAAAATAAATAAGGAAGCAGTATGGTTCCCT
 TCCAATAAACAGCAGGCAATCAGCAGCAAGTTCAAGCTGTAATAGATGCTGGGTTAATCCCTATGATTA
 TTCATCAGCTCGCTAAGGGGGACTTTGGAACACAAAAGGAAGCTGCTTGGGCAATTAGCACTTAAACGAT
 AAGTGGCAGAAAAGATCAAGTTGAATACCTTGTACAGCAGAACGTAAATACCACCATTCTGTAACCTACTG
 TCAGTAAAAGATTCTCAAGTGGTGCAGGTGGTTCTAGATGGTCTTAAAAACATCCTGATAATGGCTGGTG
 ATGAAGCAAGCACAATAGCTGAGATCATAGAAGAGTGTGGAGTTTGGAGAAAATTGAAGTTTTGCAGCA
 ACATGAAAATGAAGACATATATAAATTAGCATTGAAATCATAGATCAATATTTCTGTGTGATGATATT
 GATGAAGATCCTAGCCTCATTCCAGAAGCAACACAAGGAGGACTTACAATTTTGACCCAACAGCCAACC
 TTCAAACAAAAGAATTTAATTTTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG208345 representing NM_008466
 Red=Cloning site Green=Tags(s)

MAENPGLNHRIKSFKNKGRDVEIMRRHRNEVTVELRKNKRDEHLLKKNRNPQEESESDVDADDFKAQN
 VTLEAILQNATSDNPVVQLSAVQAARKLLSSDRNPPIDDLIKSGILPILVKCLERDDNPSLQFEAAWALT
 NIASGTSAQTAQVQSNVPLFLRLLHSPHQNVCEQAVWALGNIIGDGPQCRDYVISLGVKPLLSFINP
 SIPITFLRNVTWVIVNLCRNKDPMPMETVQEILPALCVLIYHTDINILVDTVWALSYLTDGGNEQIQMV
 IDSGVVPFLVPLLSHQEVKVTAAALRAVGNIVTGTDEQTQVVLNCDVLSHFPNLLSHPKEKINKEAVWFL
 SNITAGNQQQVQAVIDAGLIPMIHQKLAGDFGTQKEAAWAISNLTISGRKDQVEYLVQQNVIPPFENLL
 SVKDSQVVQVLDGLKNILIMAGDEASTIAEIIIECGGLEKIEVLQHQHENEDIYKLAFEIIDQYFSGDDI
 DEDPSLIPEATQGGTYNFDPTANLQTKENF

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_008466

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.

RefSeq: [NM_008466.5](#), [NP_032492.1](#)

RefSeq Size: 4167 bp

RefSeq ORF: 1566 bp

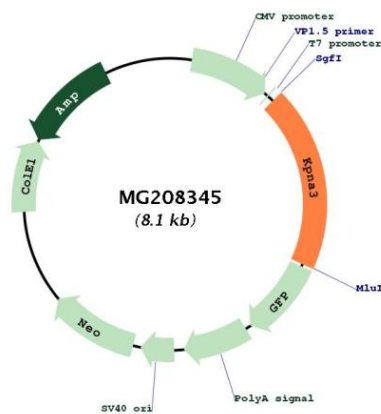
Locus ID: 16648

UniProt ID: [O35344](#)

Cytogenetics: 14 D1

Gene Summary:

Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds specifically and directly to substrates containing either a simple or bipartite NLS motif. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS.[UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG208345