

Product datasheet for **RC233079**

Kinesin Heavy Chain 2 (KIF2A) (NM_001243952) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kinesin Heavy Chain 2 (KIF2A) (NM_001243952) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIF2A
Synonyms:	CDCBM3; HK2; KIF2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC233079 representing NM_001243952
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCCGAATACATCAAGCAATGGTAACATCTTTAAATGAAGATAATGAAAGTGAACCTGTTGAATGGA
TAGAAAAATGGAGATACAAAAGGCCAAAGAGATTGACCTGGAGAGCATCTTTTCACTTAACCCCTGACCTTGT
TCCTGATGAAGAAATTGAACCCAGTCCAGAAAACCTCCACCTCCAGCATCCTCAGCCAAAAGTAAACAAA
ATTGTAAGAATCGACGGACTGTAGCTTCTATTAAGAATGACCCTCCTTCAAGAGATAATAGAGTGGTTG
GTTGAGCAGTGCACGGCCAGTCAATTTCTGAACAGTCTTCTCTGCACAACAGAATGGTAGTGTTC
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AAAGAAGTAGAAAACGCAAGAAAACGAGAGAAAAGGAGATTGCAACAGCAAGAATTAGAGAAAAA
GAGCCCAGGACGTTGATGCTACAAACCCAAATTATGAAATATGTGTATGATCAGAGACTTAGAGGAAG
TTTGGATTATAGACCATTAACAACAGCAGATCCTATTGATGAACATAGGATATGTGTGTGTGAAGAAA
CGACCACTCAATAAAAAAGAAAACCAATGAAAGATCTTGATGTAATCACAATTCCTAGTAAAGATGTTG
TGATGGTACATGAACAAAAAAGTAGATTTAACAAGGTACCTAGAAAACCAAACTTTGTTTTGA
TTATGCCTTTGATGACTCAGCTCCTAATGAAATGGTTTACAGGTTTACTGCTAGACCACTAGTGGAACT
ATATTTGAAAGGGGAATGGCTACATGCTTTGCTTATGGGCAGACTGGAAGTGGAAAACTCATACTATGG
GTGGTACTTTTCAGGAAAGAACCAAGATTGTTCTAAAGGAATTTATGCATTAGCAGCTCGAGATGTCTT
TTAATGCTAAGAAGCCAACTATAAGAAGCTAGAACTCAAGTATATGCAACCTTCTTTGAAATTTAT
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TTCAAGTGGTGGATTACAGGAACGGGAGGTCAAATGTGTTGAAGATGTACTGAACTCATTGACATAGG
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GAAGTAGATTATGATGTCGATTATGCTACACAACCTGAAGCTATTCTTGAGCAAAAAATAGACATTT
TAACTGAACTGCGGGATAAAGTGAATCTTTCCGTGCAGCTCTACAAGAGGAGGAACAAGCCAGCAAGCA
AATCAACCCGAAGAGACCCCGTGCCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC233079 representing NM_001243952
 Red=Cloning site Green=Tags(s)

MGRIHQAMVTSLNEDNESVTVEWIENGDTKGKEIDLESIFSLNPDLPDEEIEPSPETPPPPASSAKVNK
 IVKNRRTVASIKNDPPSRDNRVVGSARARPSQFPEQSSAQQNGSVSDISPVQAAKKEFGPPSRKSNVCV
 KEVEKLEKREKRRRLQQQLREKRAQVDATNPNYEIMCMIRDFRGLDYRPLTTADPIDEHRICVCRK
 RPLNKKETQMKDLVDVITIPSKDVVMVHEPKQKVDLTRYLENQTFRFDYAFDDSAAPNEMVYRFTARPLVET
 IFERGMATCFAYGQTGSGKTHTMGGDFSGKNQDCSKGIYALAARDVFLMLKKNYKLELQVYATFFEIY
 SGKVFDLLNRKTKLRVLEDGKQQVQVVLQEREVKVEDVLKLDIDGNSCRTSGQTSANAHSSRSHAVFQ
 IILRRKGLHGFSLIDLAGNERGADTSSADRQTRLEGAEINKSLLALKECIRALGRNKPHTPFRAKLT
 QVLRDSFIGENSRTCMIATISPGMASCENTLNTLRYANRVKELTVDPAAAGDVRPIMHHPNQIDDLTQ
 WGVGSSPQRDDLKLLCEQNEEVSPQLFTFHEAVSQMVEMEEQVVEDHRAVFQESIRWLEDEKALLEMTE
 EVDYDVSYATQLEAILEQKIDILTELRDKVKSFRALQEEEQASKQINPKRPRAL

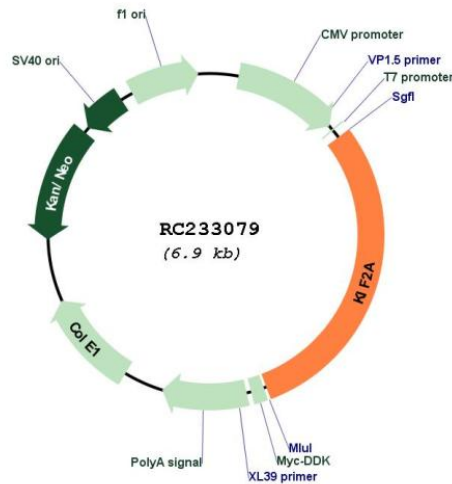
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001243952

ORF Size: 2058 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_001243952.1](#), [NP_001230881.1](#)

RefSeq Size: 4261 bp

RefSeq ORF: 2040 bp

Locus ID: 3796

UniProt ID: [O00139](#)

Cytogenetics: 5q12.1

Protein Families: Druggable Genome

MW: 78.2 kDa

Gene Summary: The protein encoded by this gene is a plus end-directed motor required for normal mitotic progression. The encoded protein is required for normal spindle activity during mitosis and is necessary for normal brain development. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]