

Product datasheet for RC214527

KIF1A (NM_004321) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIF1A (NM_004321) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIF1A
Synonyms:	ATSV; C2orf20; HSN2C; MRD9; NESCAVS; SPG30; UNC104
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214527 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGGGCTTCGGTGAAGGTGGCGGTGCGGGTCCGCCCTTCAATCCCGGAAATGAGCCGTGACT
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TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214527 protein sequence

Red=Cloning site Green=Tags(s)

MAGASVKVAVRVRPFNSREMSRDSKCI IQMSGSTTTIVNPKQPKETPKSFSFDYSYWSHTSPEDINYASQ
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SVEVSYMEIYCERVRDLLNPKNGNLRVREHPLLGPYVEDLSKLAVTSYNDIQDLMDSGNKARTVAATNM
NETSSRSHAVFNII FTQKRHDAETNITTEKVS KISLVDLAGSERADSTGAKGTRLKEGANINKSLTTLGK
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LTRPCPGPCHCKYDLLVYFEICELEANGDYIPAVVDHRGGMPCMGTFLLHQGIQRRTITV TLLHETGSHIR
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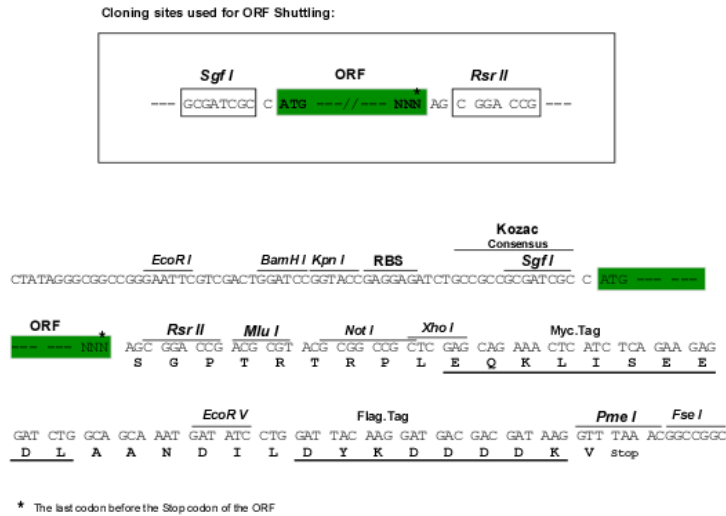
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Chromatograms:

https://cdn.origene.com/chromatograms/mk6795_a11.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:


ACCN: NM_004321

ORF Size: 5070 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_004321.8](#)

RefSeq Size: 8743 bp

RefSeq ORF: 5073 bp

Locus ID: 547

UniProt ID: [Q12756](#)

Cytogenetics: 2q37.3

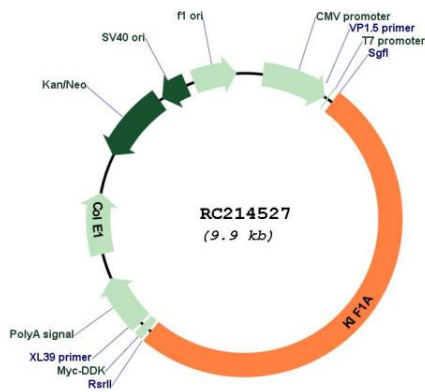
Domains: FHA, kinesin, PH

Protein Families: Druggable Genome

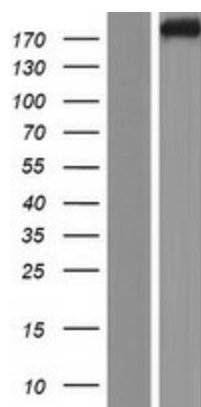
MW: 191.1 kDa

Gene Summary: The protein encoded by this gene is a member of the kinesin family and functions as an anterograde motor protein that transports membranous organelles along axonal microtubules. Mutations at this locus have been associated with spastic paraplegia-30 and hereditary sensory neuropathy IIC. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Apr 2012]

Product images:



Circular map for RC214527



Western blot validation of overexpression lysate (Cat# [LY418066]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214527 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).