

Product datasheet for **RC214978**

KIF6 (NM_145027) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KIF6 (NM_145027) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	KIF6
Synonyms:	C6orf102; dj137F1.4; dj188D3.1; dj1043E3.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC214978 representing NM_145027
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTGAAGCAGACTATCCAGATATTCGCGAGGGTGAAGCCCCCTGTCCGGAAGCACCAACAAGGGATTT
 ATTCCATAGATGAAGATGAAAAATTAATACCTAGCTTGAAATCATCTTACCACGTGATTTGGCAGATGG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214978 representing NM_145027
Red=Cloning site Green=Tags(s)

MVKQTIQIFARVKPPVRKHQQGIYSIDEDKLIPLSLEIILPRDLADGFVNNKRESYKFKFQRFIDQDANQ
ETVFENIAKPVAGSVLAGYNGTIFAYGQTGSGKTFTITGGAERYSDRGIIPRTL SYIFEQLQKDSSKIYT
THISYLEIYNCEGYDLLDRHEASSLEDLPKVTILEDPDQNIHLKNTLHQATTEEEALNLLFLGDTNRM
IAETPMNQASTRSHCIFTHLSSKEPGSATVRHAKLHLVLAGSERVAKTGVGGHLLTEAKYINLSLHYL
EQVIALSEKHRSHIPYRNSMMSVLRDSLGGNCMTTMIATLSLEKRNLDSEISTCRFAQRVALIKNEAV
LNEEINPRLVIKRLQKEIQELKDELAMVTGEQRTEALTEAELLQLEKLITSFLEQDSDSRLEVGADMRK
VHHCFHHLKLLNDKILENNTVSSSESKDQDCQEPLKEEYRKLRLDILKQRDNEINILVNMLKKEKKAQ
EALHLAGMDRREFRQSQSPPFRLGNPEEGQRMRLSSAPSQAQDFSILGKRSSLLHKKIGMREEMSLGCQE
AFEIFKRDHADSVTIDDNKQILKQRFSEAKALGESINEARSKIGHLKEEITQRHIQQVALGISENMAVPL
MPDQQEEKLRSQLEEEKRRYKTMFTRLKALKVEIEHLQLLMDKAKVKLQKEFEVWAAEEATNLQVNSPAV
NSLDHTKPFLLQTSDSQHEWSQLLSNKSSGGWEVQDQGTGRFDVCDVNARKILPSPCSPHSQKQSSTSTP
LEDSIPKRPVSSIPLTGDSQTDSDIIAFIKARQSILQKQLGSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8027_e02.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_145027

ORF Size: 2442 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_145027.6](#)

RefSeq Size: 2917 bp

RefSeq ORF: 2445 bp

Locus ID: 221458

UniProt ID: [Q6ZMV9](#)

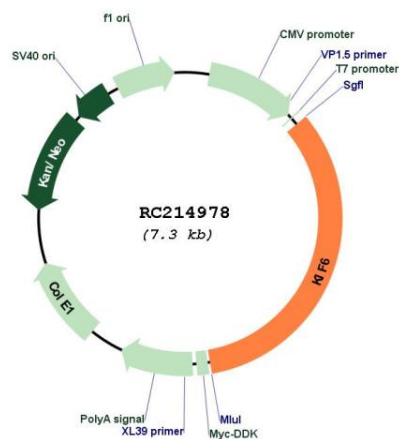
Cytogenetics: 6p21.2

Protein Families: Druggable Genome

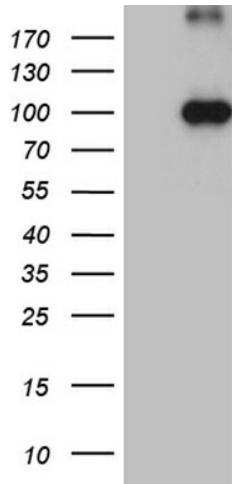
MW: 92.4 kDa

Gene Summary: This gene encodes a member of a family of molecular motors which are involved in intracellular transport of protein complexes, membrane organelles, and messenger ribonucleic acid along microtubules. Kinesins function as homodimeric molecules with two N-terminal head domains that move along microtubules and two C-terminal tail domains that interact with the transported cargo, either directly or indirectly, through adapter molecules. This gene is ubiquitously expressed in coronary arteries and other vascular tissue. A naturally occurring mutation in this gene is associated with coronary heart disease. [provided by RefSeq, May 2017]

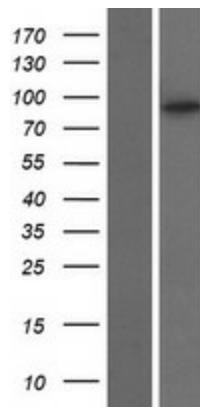
Product images:



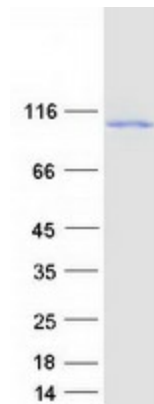
Circular map for RC214978



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY KIF6 (Cat# RC214978, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-KIF6 (Cat# [TA811816])(1:2000). Positive lysates [LY408088] (100ug) and [LC408088] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY408088]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214978 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified KIF6 protein (Cat# [TP314978]). The protein was produced from HEK293T cells transfected with KIF6 cDNA clone (Cat# RC214978) using MegaTran 2.0 (Cat# [TT210002]).