

Product datasheet for MR231859

Kif14 (NM_001287179) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kif14 (NM_001287179) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Kif14
Synonyms: D1Ert367e; E130203M01
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR231859 representing NM_001287179
 Red=Cloning site Blue=ORF Green=Tags(s)

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 GCC**CGATCGCC**

ATGTCAGTACACACTTCGCATAGCAGACACAACATCGGAAGCCTGGAGGTTTCTTCTTCACAGAAGATTT
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Protein Sequence:

>MR231859 representing NM_001287179
Red=Cloning site Green=Tags(s)

MSVHTSHSRHNIGSLEVSSSQKISASSGLVHSSRLELHLKADMSECENHDPFVNAGSKTIDINSTYVISA
CKKTRETPVTS DPRRLSLQRRATCGDRESSLLGSELGNRRTADTSLRLQRRHGRADYVGKWETLNPVGGN
PGSDSASQASRTEAKGVNNDTRVLSVVSVKDSNDTGLTRCKDPGPPVGSNEKVTVKDINSRAPVGSQR
QTEAMRSGHLVVQLTESKSDTPVSGGRNSHRGNAGKDTAKQVGTFGSSDTRTPVKCVLEHRWTPRHDP
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RQDL SRQSAREEVTQMKASTVEVWGSLENAVAEWRTKSFRTQAQEGSRQVSKLLSLASEFLKLSCLQ
QTVEMIVSALRGCPSDLHCLRSTETICSLARKLHSDFAHSASAGSCGNELPRADCEELES LAKSLLLC
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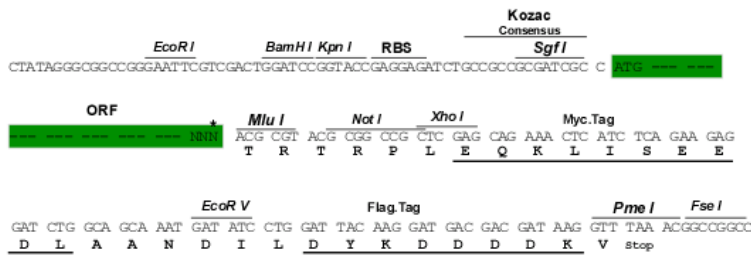
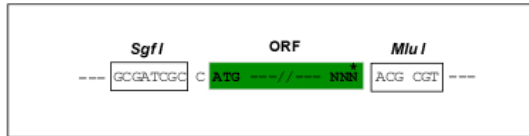
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Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

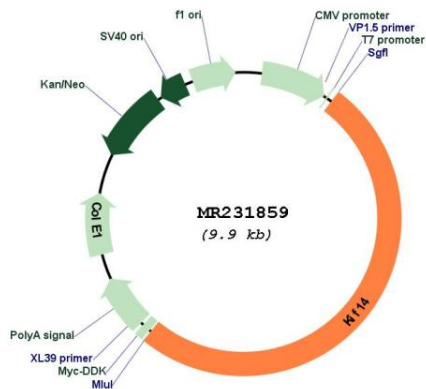


* The last codon before the Stop codon of the ORF

ACCN:	NM_001287179
ORF Size:	5022 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:	<ol style="list-style-type: none"> 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:	<u>NM_001287179.2</u> , <u>NP_001274108.1</u>
RefSeq Size:	8338 bp
RefSeq ORF:	5025 bp
Locus ID:	381293
UniProt ID:	<u>L0N7N1</u>
Cytogenetics:	1 59.8 cM
MW:	186.9 kDa

Gene Summary:

Microtubule motor protein that binds to microtubules with high affinity through each tubulin heterodimer and has an ATPase activity (PubMed:24949858). Plays a role in many processes like cell division, cytokinesis and also in cell proliferation and apoptosis (By similarity). During cytokinesis, targets to central spindle and midbody through its interaction with PRC1 and CIT respectively (By similarity). Regulates cell growth through regulation of cell cycle progression and cytokinesis. During cell cycle progression acts through SCF-dependent proteasomal ubiquitin-dependent protein catabolic process which controls CDKN1B degradation, resulting in positive regulation of cyclins, including CCNE1, CCND1 and CCNB1 (By similarity). During late neurogenesis, regulates the cerebellar and cerebral cortex development and olfactory bulb development through regulation of apoptosis, cell proliferation and cell division (PubMed:23308235, PubMed:24931760). Also is required for chromosome congression and alignment during mitotic cell cycle process (By similarity). Regulates cell spreading, focal adhesion dynamics, and cell migration through its interaction with RADIL resulting in regulation of RAP1A-mediated inside-out integrin activation by tethering RADIL on microtubules (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for MR231859