

Product datasheet for **MC229648**

Kif14 (NM_001287179) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Kif14 (NM_001287179) Mouse Untagged Clone
Tag: Tag Free
Symbol: Kif14
Synonyms: D1Ertd367e; E130203M01
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC229648 representing NM_001287179
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCAGTACACACTTCGCATAGCAGACACAACATCGGAAGCCTGGAGGTTTCTTCTTCACAGAAGATT
 CAGCATCCAGTGGCCTCGTCCACAGCAGCCGGTGGAACTGCCTGAAGGCAGATATGTCAGAGTGTGA
 GAATCATGATCCATTCGTGAATGCTGGAAGTAAAACCATCGACATAAATAGCACTTATGTTATCTCTGCC
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 ACGATGATGGGGCTAATGAAGAACCAGGAATAATTCTAGATTCTGTGAAGATCTCTTTGCTCAATAG



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 GCTTGGGATCTCAACTTTCTGGAGCCTGGAAAAGTTTGAATCTAACTTGACGCAATGAAAGAGCTTTAT
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 AGCACCATTTACTCAAATTCATCAGAGTCTTTCTTCCCGGATTTGCAAAGAATTGATTGGCTCATCAA
 TAGATTTCTCGGACAGAGTTTCGATGAAGAGAAAATATAGCAGATAGCCTGATAAATAATCTCCTTAG
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 TATTA AAAA ACTCGGAGGCTATTTGCAATTGTTTTGCAGGGATGCTGTTCGGATATTTTCATCGATGGTT
 AAAGAGGCTCAAACAAGTTCATGAAGATTATACAGCAGGCTGTTCAAGTGTGTGGTCAAGTGTTC
 TGAAGGGAGCAAGCTCTGTGTTCTGGAAAACAGCAGCAAAGTCTCCAGTACCCAGGAGTTCAAGGCGC
 TCTCCAGGATGGTGAACCTCTGGGATGAAGAGTCTTACTGACTGGGCTGGAGACCGCCAAGACCTC
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 CAAACCGTTGAGATGATTGTATCTGCGCTGAGAGGGTCCCCAGTACTGCACTGTCTCAGAAGCTGCA
 CCGAGACTATCTGAGCCTGGCTCGCAAGCTTACAGTACTTACAGCAGACTCTGCCTCTGCTGGCAG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_001287179
Insert Size:	5025 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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

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]