

## Product datasheet for **RG226430**

### KIF13A (NM\_001105566) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KIF13A (NM_001105566) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KIF13A
Synonyms:	bA500C11.2; RBKIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226430 representing NM_001105566 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGGATACCAAGGTAAAAGTTGCCGTCCGGTCCGGCCATGAACCGACGAGAACTGGAAGTGAACA  
CCAAGTGCCTGGTGGAGATGGAAGGGAATCAAACGGTCTGCACCCTCCTCCTTCAACACCAAACAGGG  
AGAAAGGAAACCTCCCAAGGTATTTGCCTTTGATTATTGCTTTTGGTCCATGGATGAATCTAACACTACA  
AAATACGCTGGTCAAGAAGTGGTTTTCAAGTGCCTTGGGGAAGGAATCTTGAAAAAGCCTTTCAGGGT  
ATAATGCGTGTATTTTGCATATGGACAGACAGGTTCCGGAAAAATCCTTTCCATGATGGCCATGCTGA  
GCAGCTGGGCCTTATTCCAAGGCTCTGCTGTGCTTTATTTAAAAGGATCTCTTTGGAGCAAATGAGTCA  
CAGACCTTTAAAGTTGAAGTGTCTATATGAAATTTATAATGAGAAAAGTTCGGGATCTTTTAGACCCCA  
AAGGGAGTAGACAGTCTCTTAAAGTTCGAGAACATAAAGTTTTGGGACCATATGTAGATGGTTTATCTCA  
ACTAGCTGTCACTAGTTTGAGGATATTGAGTCATTGATGTCTGAGGGAAATAAGTCTCGAACGGTAGCT  
GCTACCAACATGAACGAAGAAAGCAGCCGCTCCCATGCTGTGTTCAACATCATAATCACACAGACTTT  
ATGACCTGCAGTCTGGGAATCCGGGGAGAAAGTCAGTAAGGTCAGCTTGGTAGACCTGGCGGGTAGCGA  
AAGAGTATCTAAAACAGGAGCTGCAGGAGAGCGACTGAAAGAAGGCAGCAACATTAACAAATCGCTTACA  
ACCTTGGGGTGGTTATATCATCACTGGCTGACCAGGCAGCTGGCAAGGGTAAAAGCAAATTTGTGCCTT  
ATCGAGATTCAGTCTCACTTGGCTGCTTAAGGACAACCTTGGGGGCAACAGCCAAACCTCTATGATAGC  
CACAATCAGCCAGCCGAGACAACATGAAGAGACCCTCCACATTAAGATATGCAGACCCGAGCCAAA  
AGGATTGTGAACCATGCTGTTGTGAATGAGGACCCCAACGAAAAGTGATCCGAGAACTGCGGGAGGAAG  
TCGAGAAACTGAGAGAGCAGCTCTCAGGCAGAGGCCATGAAGGCCCTGAACTGAAGGAGAAGCTCGA  
AGAGTCTGAAAAGCTGATAAAAAGAACTAACAGTGACTTGGGAAGAGAAGCTGAGAAAAACAGAAGATA  
GCACAGGAAAGACAACGACAACCTGAAAGCATGGGGATTTCCCTGGAGATGTCCGGTATCAAGGTGGGG  
ATGACAAATGCTACTTAGTCAATCTGAATGCAGACCCTGCTTTAACGAACCTCTGGTTTATTATTTAA  
GGATCACACCAGGTGGGTGCAGATACCTCAAGATATCCAGCTTTTTGGCATAGGAATTCAGCCTCAG



[View online »](#)

CACTGTGAGATTGACATTGCATCTGATGGAGACGTCACTCTCACTCCAAAAGAAAATGCAAGGTCCTGTG  
 TGAACGGCACCCCTTGTGTGACGTACCACCCAGCTGTGGCATGGTGACCGAATCCTATGGGGAAAATATCA  
 CTTTTTGAATAAACTTACCTAAGAGGAAACGTGCGAGATTGGTTGAAAGACTTTGAAAAAGAACGGGC  
 CCGCCAGAGCATGACCTGGATGCAGCCAGTGAGGCTTCTCTGAACCAGACTATAACTATGAATTTGCAC  
 AGATGGAAGTTATCATGAAAACCTGAATAGTAATGACCCAGTTCAAAATGTGGTTCAAGTCTGGAGAA  
 ACAATACCTAGAAGAAAAGAGAAGTGCCCTAGAGGAGCAGCGGCTCATGTATGAGCGGAACTGGAGCAA  
 CTCCCGCAGCAGCTCTCCCGCAGCAGGCACAGAGTAGCGGCCCTGACCCGCTTACAGCAGCC  
 AGACAGCGCAGCAGAAGGTGACCCAGTGGGCAGAGAAGAGAGGGATGAACTCTCCGACAAAAGCCTGGCAAA  
 ACTGCGAGAGCAGCTGGTTAAAGCTAATACCTTGGTGAGGGAAGCAAACCTTCTGGCTGAGGAAATGAGC  
 AAACCTCACCGATTACCAAGTGACTCTTCAGATCCCTGCTGCAAACCTCAGTGCCAATAGGAAGAGAGGTG  
 CAATAGTGAGTGAACCAGCTATCCAAGTGAGGAGGAAAGGAAAGAGCACCCAAGTGTGGACCATTGAGAA  
 GCTGGAGAATAAATTAATTGACATGAGAGACCTTACCAAGAATGGAAGGAAAAAGTTCTGAGGCAAAG  
 AGACTCTACGGAAAACGAGGTGACCCCTTCTATGAAGCCCAAGAAAATCACAACTCATCGGGTGGCGA  
 ATGTATTCTTGAATGCCTTCTGTGATGTGAACTTCAGTATGCAGTCCCTATCATCAGCCAGCAGGG  
 GGAGGTTGACGGCGTCTCCACGTGGAAGTGATGCGTGTACAGGAGCTTCCAGAGCGTGTGGTGGAG  
 GATGACTCTTCGAGAAATTCAGTGAAAGTGGGAGCCTTGAAGTCGTAGACAGCAGCGGGGAAATCATT  
 ACCGAGTCAAAAAGCTGACATGTCGGGTAAAAATTAAGAAGCAACGGGGCTGCCCTTAAACCTCTCAAA  
 TTTTGTCTTGTCAATACACATTCTGGGACAGTGTGAGTCTACGGTGGCTGCCCGGTGGTGGACCC  
 GAGGTGCCTTACCACAGTCCAAGGATGCCAGTACACAGTGACCTTCTCCACTGTAAGGACTATGTGG  
 TGAATGTAAACAGAAGAAATTTCTGGAGTTCATTTAGATGGAGCACTGGCCATTGAAGTATGGGGCCACCG  
 GTGTGCTGGAATGGCAGCTCCATCTGGGAGTTCGATTCTTTCATGCTAAGACAAGAAGCACTGCATGAC  
 AGGTGGAATGAAGTAAACGGAAGAATAGAAATGTGGATCCATATTAGAATTGAATGAGTAGGAGAGT  
 ATGCTGCAAGTGAAGTTCATCAGGCAAAAGATGTCAACACAGGAGGCATTTTCAACTTAGACAGGTC  
 TTCCCGTAGAGTACAAGTACGGGTGAAACCTGTGCAGCATTACAGGACACTGCCACTTATGGTTGAAGCC  
 ATCCTGTGAGTATCCATCGGCTGTGTAACCTGCCAGGTCCACCAAACCTCAAAAGAGGGCTGGACAGTTACC  
 AGAGAGATGATGAGGATGGTGTGATATGGATAGTTATCAGGAAGAAGACTTAAACTGCGTAAGGGAGAG  
 GTGGTCAGATGCACTCATTAAACGACGAGAATACCTGGATGAACAGATAAAAAAGTACAGCAATAAAACA  
 GAGAAAACAGAGGACGATGTGGAGCGGGAAGCCAGCTTGTGGAGCAGTGGTGGGCTGACTGAGGAAA  
 GGAATGCTGTGCTGGTCCAGCCAGCAGTGGGATTCTGGGGCACCTGCCACTGGATCCCACCTCC  
 TGGAAATGGAACCCACATACCAGTCTCTTCTCGATTGAAATGCGGATGACCTCAGTGCCAATGAGCAG  
 CTTGTTGGCCCCATGCATCCGGCGTGAATCCATCCTGCCAAGGAGCATGGCAGCCAGTTTTTCTACC  
 TGCCCATCATAAAGCACAGTGTGATGAGGTTTACGCCACAGCCTTGGGATTCTCGGTGCATGATTC  
 TGTTCACTTGAATAGGGTACACCAACAGAAATGAAAGGATTTACCTAATTGTGAAAACACAGTTCAACT  
 AGCCACCTGCTGCTATGGAGTTAGTATTACGAAAACGAATTGCAGCCAATATTTACAACAAACAGAGTT  
 TCACGCAGAGTTTGAAGAGGAGAATATCCCTGAAAAATATATTTTATTCTGTGGTGAACCTATGAAAT  
 AGTATCCAATATACCAAAGGCAACTGAGGAGATAGAGGACCGGAAACGCTGGCTCTCCTGGCAGCAAGG  
 AGTGAAAACGAAGGCACATCAGATGGGGAGACGTACATTGAGAAGTACACTCGAGGCGTGTGCAGGTGG  
 AAAACATTTCTGAGTCTTGAACGGCTCCGGCAGGCCGTACAGTCAAAGAAGCACTTCCACCAAAGCCCG  
 GCACATTCGGAGGAGCCTCAGTACACCAAATGTTTATAATGTCTTCCAGCCGACCGGACCTTTCTGGC  
 TTTGATGAAGATGACAAGGGTTGGCCAGAGAACCAGTTGGACATGTCTGACTATAGCTCCAGTTACCAAG  
 ATGTAGCATGTTATGGAACCTTACCAGGATTCTCCTCGAAGGAATAAAGAAGGTTGTACATCAGAGAC  
 TCCTCATGCCTTAAACGTCAGCCCTTTTAAAGCATTCTCTCCTCAGCCACCAAAGTTTTTCAAGCCCTA  
 ATGCTGTAAAAGAGGAGCATAAGAAAAGGATAGCCCTGGAAGCAAGGCCTTTCTAAGCCAGGAGGACT  
 CTGAGGAGGAAGAAAATGAGCTGGAAGCTATTAACAGGAAGCTAATAAGTTACAGCCTTATGTACCTGT  
 GGAGTTTGTGACTTCAGTGTTTACAATGCCAGCTTGGAGAACAGGGAATGGTTTTCTCTAAAGTAGAT  
 CTGTCAAACCTCACGGTCTTGGAGAAAAGTGTCCCGTAGCCCTACCACCAGCAGTATTACCAGTGGCT  
 ACTTTTCCACAGTGCCTCCAATGCCACCTGTCTGACATGGTGGTCCCTCTAGTGACAGCTCAGACCA  
 GCTGGCCATTAGACGAAGGATGCAGACTCCACCGAGCACTCCACACCATCGCTTGTGCATGATTTCAAG  
 CCGTCCCTCAAACAAGAGTTGACAGAAGTCGAAAAAGGCTTGGTAAAGGACAAGATAATTGTGGTGGCAC  
 TCAAGGAAAACAGTGCCTTAGCCAAAGGGAGCCCATCATCCAGAGCATCCCTGAGAAAAACTCAAATC  
 ACTGTGCAGGACTGGCTCATGTTTCAAGACTAGATGCCTGCCCCAGCAAAATAGCCAGCCAGCCAGGGGA  
 TTCTGCCCCAGGGAGGTGACGGTAGAACACACCACCAACATCCTTGAAGACCATTCTTTCACAGAATTTA

TGGGAGTGTCCAGAGGGAAAAGATTTTGGTGGTTGACAGATTCTTCTGCTGGAGAGCTTTCCAGTAGGAG  
 GAGTCTACCAAATAAACAGCGCGCAAGACTGTCTCCGATGGGCTCCACCACCCAGCCAGCTGCATTCC  
 AAGTTAGAGAATGACCAGGTAATAATCCAGAGGCAGCCTTTTGGGTTCTGTGCTGTCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG226430 representing NM\_001105566  
 Red=Cloning site Green=Tags(s)

MSDTKVKVAVRVRPMNRRELELNTKCVVEMEGNQTVLHPPPSNTKQGERKPPKVFADYCFWSDMESNTT  
 KYAGQEVVFKCLGEGILEKAFQGYNACIFAYGQTGSGKSFMMGHAEQLGLIPRLCCALFKRISLEQNES  
 QTFKVEVSYMEIYNEKVRDLLDPKGSRQSLKVRHKKVLPYVDGLSQLAVTSFEDIESLMSEGNKSRTVA  
 ATNMNEESSRSHAVFNIIITQTLYDLQSGNSGEKVSQVSLVLDLQAGSERVSKTGAAGERLKEGNSINKSLT  
 TLGLVISSLADQAAGKSKFVQYRDSVLTWLLKDNLGGNSQTSMIATISPAADNYEETLSTLRADRAK  
 RIVNHAVVNEPNAKVIRELREEVEKLRQLSQAEAMKAPELKELESEKLIKELTVTWEKLRKTEEI  
 AQERQRQLESMGISLEMSGIKVGGDKCYLVNLDNADPALNELLVYYLKDHTRVGADTSQDIQLFGIGIQPQ  
 HCEIDIASDGDVTLTPKENARSCVNGTLVCSTTQLWHGDRILWGNHFFRINLPKRKRRDNLKDFEKETG  
 PPEHDLDAASEASPEPDYNYEFAQMEVIMKTLNSNDPVQNVVQVLEKQYLEEKRSALAEQRLMYERELEQ  
 LRQQLSPDRQPQSSGPDRLAYSSQTAQQKVTQWAEERDELFRQSLAKLREQLVKANTLVREANFLAEEMS  
 KLTQYQVTLQIPAAANLSANRKRGAIVSEPAIQVRRKGGKSTQVWTIEKLENKLDIMRDLQEWKEKVPKAK  
 RLYGKRGDPFYEAQENHNLIGVANVFLECLFCDVKLQYAVPIISQQGEVAGRLHVEVMRVTGAVPERVVE  
 DSSSENSESGSLEVVDSGGEIHRVKKLCRVKIKEATGLPLNLSNFVFCQYTFWDQCESTVAAPVVDV  
 EVPSPQSKDAQYTVTFSHCKDYVNVTEEFLEFISDGLAIEVWGHRCAGNGSSIWEVDSLHAKTRTLHD  
 RWNEVTRRIEMWISILELNELGEYAAVELHQAKDVNTGGIFQLRQHSRRVQVTVKPVQHSGLPLMVEA  
 ILSVSIQCVTARSTKLQRLDSYQRDDEDDGDDMSYQEEEDLNCVRRERWSDALIKRREYLDEQIKKVSNTK  
 EKTEDDVEREAQLVEQWVGLTEERNAVLVPAGSGIPGAPADWIPPPGMETHIPVFLDLNADDLSANEQ  
 LVGPHASGVNSILPKEHGSQFFYLPPIKHSDDDEVASATASWSSVHDSVHLNRVTPQNERIYLVKTTVQL  
 SHPAAMELVLRKRIAANIYNKQSFQSLKRRISLKNIFYSCGVTYEIVSNIPKATEEIEDRETLALLAAR  
 SENEGTSDGETYIEKYTRGVLQVENILSLERLRQAVTVKEALSTKARHRRSLSTPNVHNVSRRPDLG  
 FDEDDKWPENQLDMSDYSSSYQDVACYGTLPRDSPRRNKEGCTSETPHALTVSPFKAFSPQPPKFFKPL  
 MPVKEEHKKRIALEARPLLSQEDSEEEENELEAINRKLISSQPYVPVEFADFVYNASLENREWFSSKVD  
 LNSNRVLEKEVSRPTTSSITSGYFSSASNATLSDMVVPSDSSDQLAIQTKDADSTEHSTPSLVHDFR  
 PSSNKELTEVEKGLVKDKIIVVPLKENSALAKGSPSSQSIPEKNSKSLCRTGSCSELDACPSKISQPARG  
 FCPREVTVEHTTNILEDHSFTEFMGVSEKDFDGLTDSSAGELSSRRSLPNKTTGGKTVSDGLHHPSQLHS  
 KLENDQVIPEAAFWLCCQ

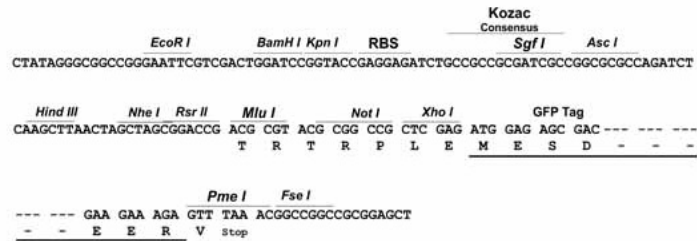
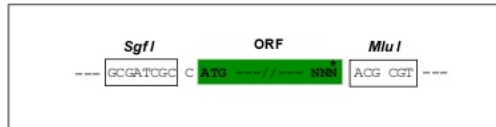
TRTRPLE - GFP Tag - V

**Restriction Sites:**

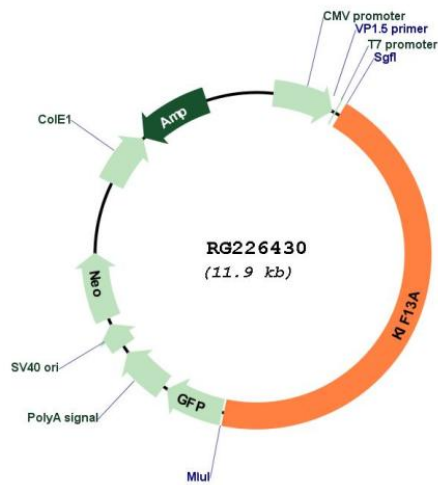
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_001105566
<b>ORF Size:</b>	5310 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001105566.3</a>
<b>RefSeq Size:</b>	5900 bp
<b>RefSeq ORF:</b>	5313 bp
<b>Locus ID:</b>	63971
<b>UniProt ID:</b>	<a href="#">Q9H1H9</a>
<b>Cytogenetics:</b>	6p22.3
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	This gene encodes a member of the kinesin family of microtubule-based motor proteins that function in the positioning of endosomes. This family member can direct mannose-6-phosphate receptor-containing vesicles from the trans-Golgi network to the plasma membrane, and it is necessary for the steady-state distribution of late endosomes/lysosomes. It is also required for the translocation of FYVE-CENT and TTC19 from the centrosome to the midbody during cytokinesis, and it plays a role in melanosome maturation. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Aug 2011]