

Product datasheet for **RG213970**

ZWILCH (NM_017975) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	ZWILCH
Synonyms:	hZwilch; KNTC1AP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence: >RG213970 representing NM_017975
 Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGGCGCGCC

ATGTGGGAGCGCTGAAGTCCGAGCAGAGGACTTTTATTCTCGTCTCCTTCAGAAATTTAATGAAGAAA
 AGAAAGGAATCCGTAAAGACCCATTCTCTATGAGGCTGATGTCCAAGTGCAGTTGATCAGCAAAGGCCA
 ACCAAACCCCTTTGAAAAATATTCTAAATGAAATGACATAGTATTCATAGTGGAAAAAGTGCCTTTAGAA
 AAGGAAGAAACAAGTCATATTGAAGAACTCAATCTGAAGAACTGCCATATCTGATTTCTCTACTGGCG
 AAAATGTTGGACCACTTGCTTTACCACTGGGAAGCAAGCAGTTAATTGGACTTTACACCATGGCTCA
 CAATCCCTAATATGACCAATTTGAAGATTAACTGCCAGTTACTGCCCTTCTCCCTTTGGGTAAGATGT
 GACAGTTGAGTCTGAAGTACTTGTGGCTAGGAGCTGAGCTTATCACAACAAACAGCATTACAG
 GAATTGCTTATATGTGGTCAGTTGTAAGCTGATAAAAAATTATTCTGTAATCTTGAACCTAAAAAA
 TTTACACAAGAAAAGACATCACTTGCTACTGTAACTCAAGGCTTTGCCAGTATGAGCTCTTTAAG
 TCCTCTGCCTTGGATGATACAATCACAGCATCACAAGTGCATCGCTTTGGATATTTCTGGAGTCCTG
 TGGATGAGATTCTTCAATCCCTCCACTCTTCAACTGCAACTCTGAATATTAAGTGGAAATCAGGAGA
 GCCCAGAGGTCCTTTGAATCATCTCTACAGAGAACTGAAATTTCTTCTGTTTTGGCTGATGGTTGAGG
 ACTGGTGTCACTGAATGGCTCGAGCCCTGGAAGCAAAATCTGCTGTTGAAGTGTTCAGGAATTTCTGA
 ATGACTTAAATAAGCTGGATGGATTTGGTGATTCTACAAAAAAGACACTGAGGTTGAGACCTTGAAGCA
 TGACACTGCTGCAGTCGATCGTCCGTCAAGCGTCTTTTCAAAGTTCGAGTGATCTTGATTTTGTCTGAG
 CAAGTGTGGTGCAAAATGAGCAGTAGTGTGATTTACACCAAGACTTGGTGAAGTGTTCACATTGATCA
 TCCAGAGTCTACAACGTGGTGATATACAGCCATGGCTCCATAGTGAAGTAACAGTTTACTAAGTAAGCT
 CATTATCAGTCTTATCATGGAACCATGGACACAGTTTCTCTCAGTGGGACTATTCCAGTTCAAATGCTT
 TTGGAATTTGGTTGGACAACTAAAGAAAGATTATATCAGTTTTTTTATAGGTCAGGAAGTGCATCTT
 TGAATCATTGGAATCTTCTTGTCTCCATCAGTAGATATACAAGAACAGGTTTATCGTGTCCAAAACT
 CCACCATATTCTAGAAATATTAGTCAGTTGCATGCCTTTTATTAAATCTCAACATGAAGTCTCTTTCT
 TTAACACAGATCTGCATAAAGTATTACAAACAAATCTCTTGTATGAGCAACACATTTTTCAGCTGCCAG
 TCAGACCAACTGCTGTAAGAAGTATATCAAAGTGAGAAGCCACAGAAATGGAGAGTGGAATATATAG
 TGGTCAAAAGAAGATTAAAGACAGTTTGGCAACTGAGTGACAGCTCACCCATAGACCATCTGAATTTTAC
 AAACCTGATTTTTCGAATTAACACTAAACGGTAGCCTGGAAGAAAGGATTTCTTTACTAACATGGTTA
 CCTGCAGCCAGTGCAATTTCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG213970 representing NM_017975
 Red=Cloning site Green=Tags(s)

MWERLNCAEDFYRLLQKFNEEKKGIRKDPFLYEADVQVQLISKQPNPLKNILNENDIVFIVEKVPLE
 KEETSHIEELQSEETAISDFSTGENVGPLALPVGKARQLIGLYTMAHNPNMTHLKINLPVTALPPLWVRC
 DSSDPEGTCWLGAEIITNNISITGIVLYVVSCKADKNYSVNLENLKNLHKRRHHLSTVTSKGFQYELFK
 SSALDDTITASQTAIALDISWSPVDEILQIPPLSSTATLNKIKVESGEPRGPLNHLRELKFLVLADGLR
 TGVTEWLEPLEAKSAVELVQEFLNDLNDLGDSTKKDTEVETLKHDTAAVDRSVKRLFKVRSDLDFAE
 QLWCKMSSSVISYQDLVKCFLLIIQSLQRGDIQPWLHSGSNSLLSKLIHQSYHGTMDTVSLSGTIPVQML
 LEIGLDKLLKDYISFFIGQELASLNHLEYFIAPSVDIQEQQVYRVQKLHHILEILVSCMPFIKSQHELLFS
 LTQICIKYKQNPDEQHIFQLPVRPTAVKNLYQSEKPKWRVEIYSGQKKIKTVWQLSDSSPIDHLNFH
 KPDFSELTLNGSLEERIFFTNMVTCSQVHFK

TRTRPLE - GFP Tag - V

Restriction Sites: AscI-MluI

Cloning Scheme:



ACCN: NM_017975

ORF Size: 1773 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.

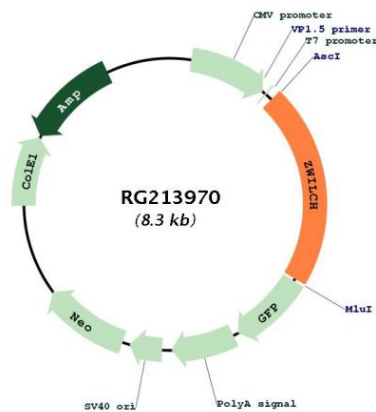
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_017975.5](#)

RefSeq Size: 3194 bp
RefSeq ORF: 1776 bp
Locus ID: 55055
UniProt ID: [Q9H900](#)
Cytogenetics: 15q22.31

Gene Summary: Essential component of the mitotic checkpoint, which prevents cells from prematurely exiting mitosis. Required for the assembly of the dynein-dynactin and MAD1-MAD2 complexes onto kinetochores. Its function related to the spindle assembly machinery is proposed to depend on its association in the mitotic RZZ complex (PubMed:15824131).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG213970