

Product datasheet for **RG205464**

PIWIL2 (NM_018068) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIWIL2 (NM_018068) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PIWIL2
Synonyms:	CT80; HILI; mili; PIWIL1L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG205464 representing NM_018068
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATCCTTTCCGACCATCGTTCAGGGGCCAGTCTCCTATCCACCCATCCCAGTGCCAGGCTGTACGGA
 TGCCAGGCTGTTGGCCACAAGCTTCTAAACCTTTGGACCCAGCTCTGGGACAGGGGAGCACCTGCAGGCAG
 AGGCCATGATTTGGAAAAGCCAGAGGAACCAAGCACACAGAGGGGGCCAGCACAAAAGGGAGTCTGTGGGT
 TTGGTCTCCATGTTCCGAGGCTGGGCATTGAAACAGTTTCTAAGACCCCTCTGAAAACGGGAAATGCTTC
 CATCAGGTAGAGGCATTTTAGGTCGAGGCTTGTCTGCTAATCTGGTACGCAAGGACAGGGAGGAAGTCTC
 TCCACTTTTTGGGATCCAAAAGTGTGGCGGCTGGGACAGCAAGATGGCAGAGACCTCCGTTGGTTGG
 AGTAGGACGCTTGAAGAGGGAGTTCAGATGCGTCTTTATTACCACTGGGAAGAGCAGCAGGTGGTATCA
 GCAGAGAAGTGGACAAGCCTCCCTGTACCTTCAGCACACCGTCCCGGGTCCCCGCAGCTGTATCACC
 ACCAGCTCTGCCAGTCTCCCCTGCACCTCCAGATCGCCCTCTGGTCTGACTGTGGAACACAAGGAA
 AAAGAGCTTATTGTGAAGCAAGGATCAAAAGGAACACCTCAGTCTTTGGGACTGAACCTCGTCAAAATAC
 AGTGTCATAATGAAGCAGTTTATCAATATCATGTGACTTTCAGCCCAATGTGGAGTGCAAAAGCATGAG
 GTTCGGCATGTTGAAGGACCATCAAGCTGTACCGGCAACGCTCACTGCGTTTGATGGATCTATTCTCTAT
 CTGCCTGTTAAGCTTCAACAAGTCTTGAGTAAAAAGTCAAAGGAAAACAGACAGTGTGAAATCAGCA
 TTAAGATTCAGATGACAAAGATCCTGGAGCCCTGCTCTGACCTGTGCATTCCTTCTACAATGTTGTTTT
 CCGTCGGGTAATGAACTTTTAGATATGAAGCTTGTGGGAGAACTTTTATGACCCTACAAGTGCATG
 GTACTACAGCAACACAGATTGCAGATCTGGCCAGGCTATGCAGCTAGCATCCGAAGGACAGATGGAGGGC
 TCTTCCTGCTAGCTGATGCTCCCATAAAGTCAATCGGAATGACTGTGTGCTGGATGTCATGATGCCAT
 TTATCAGCAGAATAAAGAACAACCTCCAGGATGAGTGACTAAGCTTCTGGTTGGCAATATTGTTATCACC
 CGATATAACAATCGTACCTATCGTATTGATGATGTGGATTGGAATAAGACTCCAAAGGATAGCTTACCGA
 TGTCTGATGGGAAAGAGATCACATTCTTGAATACTACAGCAAAAATTATGGGATCACAGTTAAGGAAGA
 GGACCAGCCATTGCTGATTCACAGGCCAGTGAGAGACAGGATAATCATGGGATGCTGCTAAAAGGGGAA
 ATCCTGCTGCTGCCTGAGCTTTCTTTTATGACCGGAATCCAGAGAAGATGAAGAAGGACTTCAGAGCCA
 TGAAGGATTTGGCTCAGCAAATCAATCTGAGCCCAAGCAACACCATAGTCTTTGGAATGCTTGTCTGCA
 AAGAATTGCAAAGACGAGCCAGCCACCAATGAACTGATGCGTTGGGGCTCCGCTGCAAAAGGATGTA
 CATAAGATTGAAGGACGTTCTGCCAATGAAAGAATTAACCTAAAAAATACTTCGTTTATCACATCTC
 AGGAACTAACTGGGTTAAGGAAGTAACAGAGACCCCTCCATCTTGACTATCCCATGCATTTCTGGGC
 ACTTTTTTACCAAAGAGAGCAATGGACCAGGCTCGAGAAGTGGTCAACATGTTGGAGAAGATAGCCGGC
 CCCATTGGCATGCGTATGAGCCACCGGCTGGGTTGAACTAAAGGATGACCGAATAGAGACTTATGTCA
 GAACCATTCATCCACGTTAGGAGCTGAGGGGAAGATACAGATGGTTGTTTGATCATCATGGGCCACG
 TGATGATCTCTATGGGGCCATCAAGAAGCTGTGCTGTGTGCGAGTCCCAAGTGCCTCCAGGTTGTCAAT
 GTTCGAACCATGGTCAAGCCACCGGCTTCGGAGTGTGGCCAGAAGATTTTACTTCAGATTAAGTGA
 AATTGGGTGGTGAAGCTCTGGGGAGTGGATTCCTCTGAAACAGTTAATGGTGTGCGGATGGATGTTTA
 CCATGACCCAGTAGAGGCATGCGCTCCGTGGTTGGCTTCGTGGCAAGCATCAATCTCACCTCACAAAA
 TGGTATTCCCGGGTGGTGTCCAGATGCCGATCAGGAGATTGTGGACAGCCTGAAGCTATGCCTCGTGG
 GCTCCTTAAAAAAGTTTTATGAGGTGAACCACTGTCTACCAGAGAAGATTGGTGTACCGTGTGGAGT
 GTCTGATGGCCAACTGAAGACAGTTGCCAACTATGAGATTCTCAACTACAGAAGTGTTTTGAAGCTTTT
 GAGAATTATCAGCCCAAGATGGTGGTGTGTAGTTTCCAGAAAGAAATCAGTACTAATCTATATCTGGCTG
 CTCCTCAGAACTTTGTAAGTCCCACTCCTGGAAGTGTGGTAGATCATAACAATAACAAGCTGTGAGTGGT
 GGATTTCTATCTTCTGCCATCATGTACGGCAGGGCTGTGGCATTCTACGCATTATGTCTGTGTCTC
 AACACCGCAAACCTGAGCCCTGATCATATGCAGAGGCTGACTTTCAAAGTGTGCCACATGACTGGAATT
 GGCTGGCACCATCAGAGTTCAGCTCCTTGAAGTATGCCACAAGCTAGCTTTCTGTGACAGACACAT
 CTTGCATCATGAACCAGCCATCCAGCTGTGCGAGAACCTGTTCTTCTCTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG205464 representing NM_018068
 Red=Cloning site Green=Tags(s)

MDPFRPSFRGQSPFIHPSQCQAVRMPGCWPQASKPLDPALGRGAPAGRGHVFGKPEEPSTQRGPAQRESVG
 LVSMFRGLGIETVSKTPLKREMLPSGRGILGRGLSANLVRKDREELSPTFWDPKVLAAAGDSKMAETSVGW
 SRTLGRGSSDASLLPLGRAAGGISREVDKPPCTFSTPSRGPPLQSSPPALPQSPLHSPDRPLVLTVEHKE
 KELIVKQGSKGTPOQLGLNLVKIQCHNEAVYQYHVTFSNVVECKSMRFGMLKDHQAVTGNVTAFDGSILY
 LPVKLQQVLELKSQRKTDSAEISIKIQMTKILEPCSDLCPFYNNVFRVMKLLDMKLVGRNFYDPTSAM
 VLQQHRLQIWPGYAASIRRTDGGFLFLLADVSHKVRNDCVLDVMHAIYQQNKEHFQDECTKLLVGNIVIT
 RYNNRTYRIDVDWNKTPKDSFTMSDGKEITFLEYYSKNYGITVKEEDQPLL IHRP SERQDNHGMLLKGE
 ILLLPELSFMTGIPEKMKKDFRAMKDLAQQINLSPKQHSALECLLQRIAKNEAATNELMRWGLRLQKDV
 HKIEGRVLPMERINLKNTSFITSQELNWKVETRDPSILTIPMHFWALFYPKRAMDQARELVNMLEKIA
 GPIGMRMSPPAWVELKDDRIETYVRTIQSTLGAEGKIQMVVCIIMGPRDDL YGAIKKLCCVQSPVPSQVNN
 VRTIGQPTRLRSVAQKILLQINCKLGGELWGVDIPLKQLMVGMDVYHDP SRGMRSVVG FVASINLTLTK
 WYSRVVFMQPHQEIVDSLKLCVLSLKKFYEYVNHCLPEKIVVYRDGVSDGQLKTVANYEIPQLQKCFEAF
 ENYQPKMVFVQKIKISTNL YLAAPQNFVTPPTGTVVDHTITSCEWVDFYLLAHHVRQCGGIPHYVCVL
 NTANLSPDHMQRLTFKLCHMYWNPVTIRVPAPCKYAHKLAFLSGHILHHEPAIQLCENLFFL

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

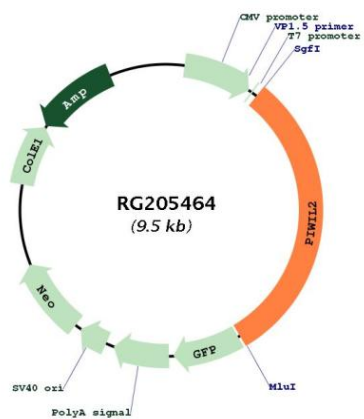


ACCN: NM_018068

ORF Size: 2919 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:	NM_018068.5
RefSeq Size:	3610 bp
RefSeq ORF:	2922 bp
Locus ID:	55124
UniProt ID:	Q8TC59
Cytogenetics:	8p21.3
Domains:	PAZ, Piwi
Protein Pathways:	Dorso-ventral axis formation
Gene Summary:	PIWIL2 belongs to the Argonaute family of proteins, which function in development and maintenance of germline stem cells (Sasaki et al., 2003 [PubMed 12906857]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG205464