

Product datasheet for **RC227303**

PIWIL2 (NM_001135721) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIWIL2 (NM_001135721) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PIWIL2
Synonyms:	CT80; HILI; mili; PIWIL1L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC227303 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATCCTTTCCGACCATCGTTCAGGGGCCAGTCTCCTATCCACCCATCCCAGTGCCAGGCTGTACGGA
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 CATCAGGTAGAGGCATTTTAGGTCGAGGCTTGTCTGCTAATCTGGTACGCAAGGACAGGGAGGAAGTCTC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC227303 protein sequence
 Red=Cloning site Green=Tags(s)

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MDPFRPSFRGQSPIHPSQCQAVRMPGCWPQASKPLDPALGRGAPAGRGHVF GKPEEPSTQRGPAQRESVG
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SRTLGRGSSDASLLPLGRAAGGISREVDKPPCTFSTPSRGGPQLSSPPALPQSPLHSPDRPLVLTVEHKE
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HKIEGRVLPMERINLKNTSFITSQELNWKVETRDP SIL TIPMHFWALFYPKRAMDQARELVNMLEKIAG
PIGMRMSPPAWVELKDDRIETYVRTIQSTLGAEGKIQMVVCIIMGPRDDL YGAIKKLCCVQSPVPSQVVN
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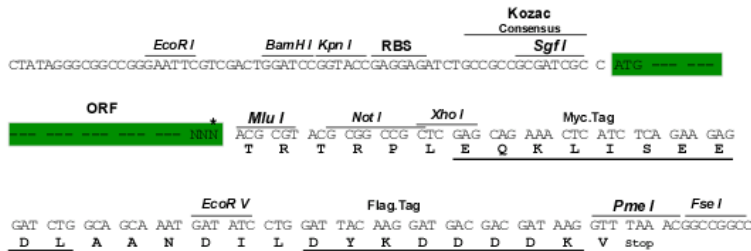
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6141_c06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



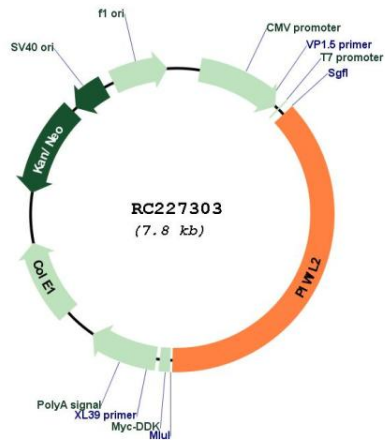
* The last codon before the Stop codon of the ORF

ACCN: NM_001135721

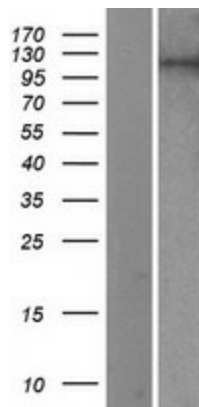
ORF Size: 2919 bp

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_001135721.2
RefSeq Size:	3997 bp
RefSeq ORF:	2922 bp
Locus ID:	55124
UniProt ID:	Q8TC59
Cytogenetics:	8p21.3
Protein Pathways:	Dorso-ventral axis formation
MW:	109.8 kDa
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 RC227303



Western blot validation of overexpression lysate (Cat# [LY427682]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227303 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).