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Product datasheet for RG224247

PIWIL3 (NM_001008496) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIWIL3 (NM_001008496) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PIWIL3
Synonyms:	HIWI3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG224247 representing NM_001008496
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCTGGTAGGGCAAGGACTCGCGCCCGAGGCAGAGCCCGCCGCAGGGAGAGCTACCAACAAGAGGCAC
CTGGGGGACCCAGAGCACCTGGATCAGCTACAACCCAGGAGCCCCCTCAGTTGCAGTCGACACCCCGGCC
GCTGCAGGAGGAAGTCCCAGTGGTTAGACCTCTGCAGCCAAGAGCAGCAAGAGGAGGAGCAGGAGGAGGA
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TATAATTTGCCAGGCATCATCCGAGTTCCAGCGCCTTGCCACTATGCCCACAAGCTGGCTTACCTCGTGG
GGCAGTCCATTCACCAGGAACCGAATCGTTCCTTGTCAACTCGTCTCTTTTACCTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG224247 representing NM_001008496
Red=Cloning site Green=Tags(s)

MPGRARTRARGRARRRESYQQEAPGGPRAPGSATTQEPPQLQSTPRPLQEEVPVVRPLQPRAARGGAGGG
AQSQGVKEPGPEAGLHTAPLQERRIGGVFQDLVVNTRQDMKHVKDSKTGSEGTVVQLLANHFRVISRPQW
VAYKYNVDYKPDIEDGNLRTILLDQHRRKFGERHIFDGNSLLLSRPLKERRVEWLSTTKDKNIVKITVEF
SKELTPTSPDCLRYYNILFRRTFKLLDFEQVGRNYYTKKKAIQLYRHGTSLEIWLGYVTSVLQYENSITL
CADVSHKLLRIETAYDFIKRTSAQAQTGNIREEVTNKLIGSIVLTKYNNKTYRVDDIDWKQNPEDTFNKS
DGSKITYIDYYRQQHKEIVTVKKQPLLVSQGRWKKGLTGTQREPILLIPQLCHMTGLTDEICKDYSIMKE
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DWSREIRELPLLNAMPLHSWLILYSRSSHREAMSLKGHLQSVTAPMGITMKPAEMIEVDGDANSYIDTLR
KYTRPTLQMGMSCLLVFKVICILPNDDKRRYDSIKRYLCTKCPIPSQCVVKKTLEKVQARTIVTKIAQQM
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LKHGSNFQNPPPGTVIDVELTRNEWYDFFIVSQSVQDGTVTPTHYNVIYDTIGLSPDTVQRLTYCLCHMY
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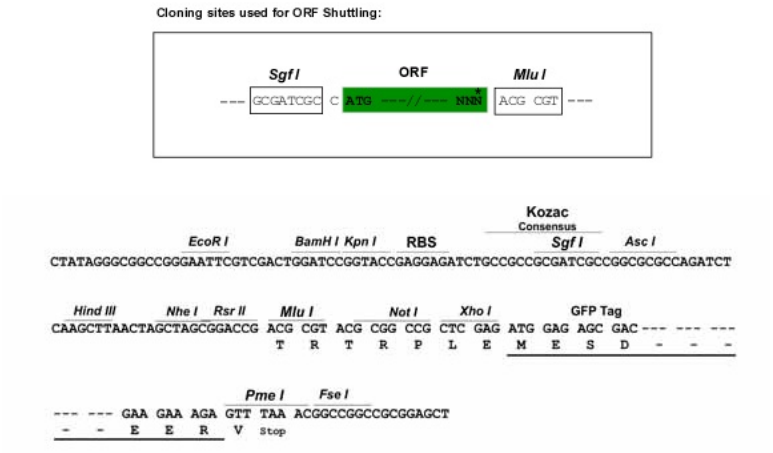
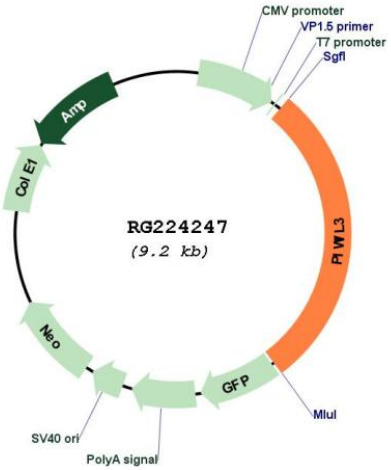
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001008496
ORF Size:	2646 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.
RefSeq:	NM_001008496.1, NP_001008496.1
RefSeq Size:	3504 bp
RefSeq ORF:	2649 bp
Locus ID:	440822
UniProt ID:	Q7Z3Z3

Cytogenetics:	22q11.23
Protein Pathways:	Dorso-ventral axis formation
Gene Summary:	This gene encodes a member of the PIWI subfamily of Argonaute family proteins. This subfamily of proteins contains a PAZ domain, found in proteins involved in RNA-mediated gene silencing, and a C-terminal Piwi domain. The encoded protein is thought to function in maintenance of germline cells. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]