

## Product datasheet for **RG205469**

### **PIWIL1 (NM\_004764) Human Tagged ORF Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                       |
| Product Name:             | PIWIL1 (NM_004764) Human Tagged ORF Clone |
| Tag:                      | TurboGFP                                  |
| Symbol:                   | PIWIL1                                    |
| Synonyms:                 | CT80.1; HIWI; MIWI; PIWI                  |
| Mammalian Cell Selection: | Neomycin                                  |
| Vector:                   | pCMV6-AC-GFP (PS100010)                   |
| E. coli Selection:        | Ampicillin (100 ug/mL)                    |



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**ORF Nucleotide  
Sequence:**

>RG205469 representing NM\_004764  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACTGGGAGAGCCCGAGCCAGAGCCAGAGGAAGGGCCCGCGGTCCAGGAGACAGCGCAGCTGGTGGGCT  
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 CTGTTGGCCAGAGTATTCACAGAGAGCCAAATCTGCTACTGTCAAACCGCCTTTACTACCTC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – **GTTTAA**

**Protein Sequence:** >RG205469 representing NM\_004764  
Red=Cloning site Green=Tags(s)

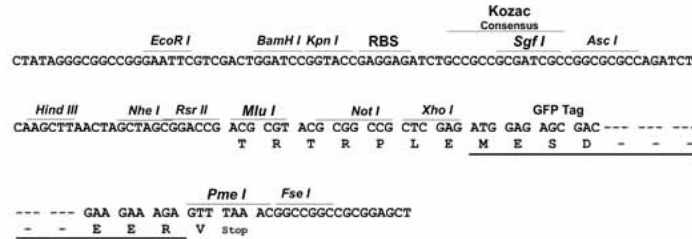
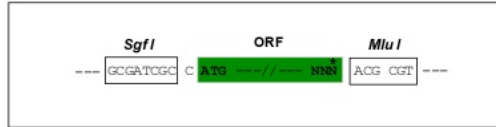
```
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NPLDNWLLIYTRRNYEAANSLIQNLFKVT PAMGMQMKKAIMIEVDDRTEAYLRVLQQKVTADTQIVVCLL
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RDGVGDGQLKTLVNYEVPQFLDCLKSIGRGNPRLTVIVVKKRVNTRFFAQSGGRLQNPLPGTVIDVEVT
RPEWYDFFIVSQAVRSGSVSPHYNVIYDNSGLKPDHIQRLTYKLCHIYYNWPGVIRVPAPCQYAHKLAF
LVGQSIHREP NLSLNRLYYL
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**ACCN:** NM\_004764

**ORF Size:** 2583 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\\_004764.2](#)

**RefSeq Size:** 3416 bp

**RefSeq ORF:** 2586 bp

**Locus ID:** 9271

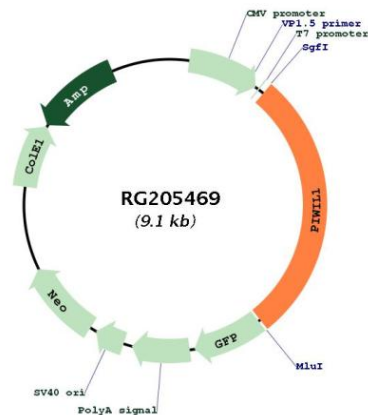
**UniProt ID:** [Q96J94](#)

**Cytogenetics:** 12q24.33

**Protein Pathways:** Dorso-ventral axis formation

**Gene Summary:** This gene encodes a member of the PIWI subfamily of Argonaute proteins, evolutionarily conserved proteins containing both PAZ and Piwi motifs that play important roles in stem cell self-renewal, RNA silencing, and translational regulation in diverse organisms. The encoded protein may play a role as an intrinsic regulator of the self-renewal capacity of germline and hematopoietic stem cells. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2010]

## Product images:



Circular map for RG205469