

## Product datasheet for **RG227715**

### **RIZ1 (PRDM2) (NM\_001135610) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RIZ1 (PRDM2) (NM_001135610) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RIZ1
Synonyms:	HUMHOXY1; KMT8; KMT8A; MTB-ZF; RIZ; RIZ1; RIZ2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG227715 representing NM_001135610 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAATCAGAACACTACTGAGCCTGTGGCGGCCACCGAGACCCTGGCTGAGGTACCCGAACATGTGCTGC  
GAGGACTTCCGGAGGAAGTGAGGCTTTCCCTTCTGCTGTTGACAAGACCCGGATTGGTGTCTGGGCCAC  
TAAACCAATTTTAAAAGGCAAAAAATTTGGGCCATTTGTTGGTGATAAGAAAAAAGATCTCAGGTTAAG  
AATAATGTATACATGTGGGAGGTGATTACCCAAATTTGGGATGGATGTGCATTGATGCCACTGATCCAG  
AGAAGGGAAGCTGGCTGCGATATGTGAATTGGGCTTGCTCAGGAGAAGAGCAAAATTTATCCCACTGGA  
AATCAACAGAGCCATTTACTATAAACTTTAAAGCCAATCGCGCCGGGCGAGGAGCTCCTGGTCTGGTAC  
AATGGGGAAGACAACCTGAGATAGCAGCTGCGATTGAGGAAGAGCGAGCCAGCGCCCGGAGCAAGCGGA  
GCTCCCCAAGAGCCGAAAGCTACAGCCTCCGCTTGGCGTCCCGATGCTCTCCACCAGCGGCCCGGTAC  
ATCACCAGGCAGTATAGGAAGGTCAAAGCTCCAGCTGCAGCCAGTTCCAGGGACCATTCTTCAAAGAGT  
AGACACTCTGGCTGCTCCCTGACAGCACCTGAAGTGACCTGGAATCAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG227715 representing NM\_001135610  
 Red=Cloning site Green=Tags(s)

MNQNTTEPVAATETLAEVPEHVLRLGLPEEVRLFPSAVDKTRIGVWATKPKILKGGKFGPFVGDKKKRSQVK  
 NNYYMWEVYYPNLGWMCIDATDPEKGNWLRVYNWACSGEEQNLFPLEINRAIYYKTLKPIAPGEE LLVWY  
 NGEDNPEIAAAIEEERASARSKRSSPKSRKATASAWRPDALHQRPRTPSGSIGRSKLQLQPSRRDHSKSKS  
 RHSGCSLTAPEVTWNQ

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001135610

**ORF Size:** 678 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\\_001135610.2](#)

**RefSeq Size:** 2715 bp

**RefSeq ORF:** 681 bp

**Locus ID:** 7799

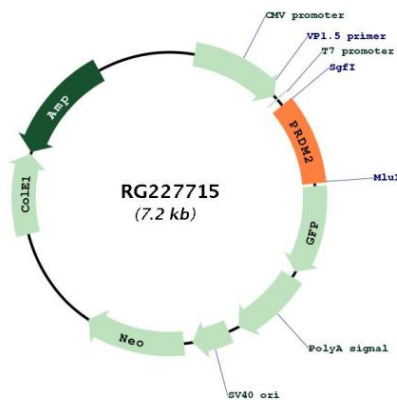
**UniProt ID:** [Q13029](#)

**Cytogenetics:** 1p36.21

**Protein Families:** Druggable Genome

**Gene Summary:** This tumor suppressor gene is a member of a nuclear histone/protein methyltransferase superfamily. It encodes a zinc finger protein that can bind to retinoblastoma protein, estrogen receptor, and the TPA-responsive element (MTE) of the heme-oxygenase-1 gene. Although the functions of this protein have not been fully characterized, it may (1) play a role in transcriptional regulation during neuronal differentiation and pathogenesis of retinoblastoma, (2) act as a transcriptional activator of the heme-oxygenase-1 gene, and (3) be a specific effector of estrogen action. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2008]

**Product images:**



Circular map for RG227715