

## Product datasheet for **RG215615**

### **PATZ1 (NM\_032052) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PATZ1 (NM_032052) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PATZ1
Synonyms:	dj400N23; MAZR; PATZ; RIAZ; ZBTB19; ZNF278; ZSG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG215615 representing NM\_032052  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGAGCGGGTGAACGACGCTTCGTGCGGCCCGTCTGGCTGCTACACATACCAGGTGAGCAGACACAGCA  
 CGGAGATGCTGCAACCTGAACCAGCAGCGCAAAAACGCGGGCGCTTCTGCGACGTGCTTTGCGGGT  
 AGGCGACGAGAGCTTCCAGCGCACCGCGCGTCTGGCCGCTGCAGCGAGTACTTTGAGTCGGTGTTC  
 AGCGCCAGTTGGGCGACGGCGGAGCTGCGGACGGGGTCCGGCTGATGTAGGGGCGCGACGGCAGCAC  
 CAGGGCGGGGGCGGGGCGAGCCGGGAGCTGGAGATGCACACTATCAGCTCCAAGGATTTGGGGACAT  
 TCTGGACTTCGCCTACACTTCCCGCATCGTGGTGCCTTGGAGAGCTTCCCGAACTCATGACGGCCGCC  
 AAGTTCCTGCTGATGAGGTGGTTATCGAGATCTGCCAGGAAGTCATCAAACAGTCCAACGTACAGATCC  
 TGGTACCCCTGCCCGCGCGATATAATGCTCTTTCGCCCCCTGGGACCTCGGACTTGGCTTCCCTTT  
 GGACATGACCAACGGGGCAGCCTTGGCAGCCAACAGCAATGGCATCGCCGCGAGCATGCAGCCAGAGGAG  
 GAGGCAGCTCGGGCGGCTGGTGCAGCCATTGCAGGCCAAGCCTCTTTGCCTGTGTACTCTGGGGTGGACC  
 GCTTGCCCATGGTGGCTGGACCCATATCCCCCAACTGCTGACTTCCCCATTCCCCAGTGTGGCATCCAG  
 TGCCCCCTCCCCTGACTGGCAAGCGAGGCCGGGGCCGCCAAGGAAGGCCAACCTGCTGGACTCAATGTTT  
 GGGTCCCCAGGGGCGCTGAGGGAGGCAGGCATCCTTCCATGCGGTCTATGTGGTAAGGTGTTCACTGATG  
 CCAACCGGCTCCGGCAGCAGGAGGCCAGCAGGTGTACCAGCCTCCAGCTGGGCTACATCGACCTTCC  
 TCCTCCGAGGCTGGGTGAGAATGGGCTACCCATCTCTGAAGACCCCGACGGCCCCGAAAGAGGAGCCGG  
 ACCAGGAAGCAGGTGGCTTGTGAGATCTGCGGCAAGATCTCCGTGATGTGTATCATCTTAACCGGCACA  
 AGCTGTCCCACTCTGGGAGAAGCCCTACTCTGCCCTGTGTGGGTTGCGGTTCAAGAGAAAAGACCG  
 CATGTCCTACCATGTGCGGTCCCATGATGGTCCGTGGGCAAGCCTTACATCTGCCAGAGCTGTGGGAAA  
 GGCTTCTCCAGGCTGATCACTTGAACGACATATCAAGCAGGTGCACACTTCTGAGCGGCTCACAAAGT  
 GTCAGACCTGCAATGCTTCTTTGCCACCCGAGACCGTCTGCGCTCCACCTGGCCTGTCATGAAGACAA  
 GGTGCCCTGCCAGGTGTGTGGGAAGTACTTGGGGCAGCATAACATGGCAGACCACCTGAAGAAGCACAGC  
 GAGGGGCCAGCAACTTCTGCAGTATCTGTAACCGAGGTCTCCAGGCACCAGGAGCCCATCTGAATGGG  
 GGAGCAGGTTCCACTGCGCCAGGACCTATGGCAACAAAGAAGGCCAGAAATGCTCACATCAGGATCCGA  
 T

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG215615 representing NM\_032052  
 Red=Cloning site Green=Tags(s)

MERVNDASCGPSGCYTYQVSRHSTEMLHNLNQQRKNGGRFCVLLRVGDESFPAAHRAVLAACSEYFESVF  
 SAQLGDGGAADGGPADVGGATAAPGGGAGGSRELEMHTISSKVFGLDILDFAYTSRIVVRLESFPELMTAA  
 KFLLMRSVIEICQEVIKQSNVQILVPPARADIMLFRPPGTSDLGFPLDMTNGAALAANSNGIAGSMQPEE  
 EAARAAGAAIAGQASLPVLPVDRDRLPMVAGPLSPQLLTSPPFSVASSAPPLTGKRGRGRPRKANLLDSMF  
 GSPGGLREAGILPCGLCGKVFTDANRLRQHEAQHGVTSLQLGYIDLPPRRLGENGLPISEDPDGRKRSR  
 TRKQVACEICGKIFRDVYHLNRHKLSHSGEKPYSCPVCGLRFKRKDRMSYHVRSHDGSVGPYICQSCGK  
 GFSRPDHLNGHIKQVHTSERPHKCQTCNASFATRDLRSHLACHEDKVPQVCGKYLRAAYMADHLKKHS  
 EGPSNFCSICNRGLQAPGAHPEWSSVPLRQDLWQRRPEMLTSGSD

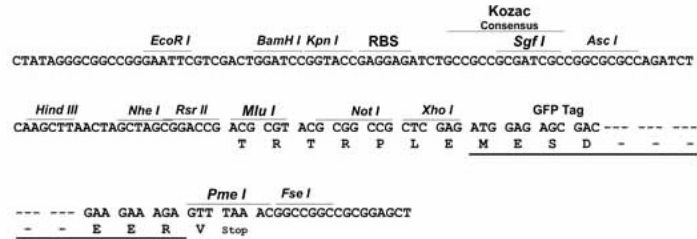
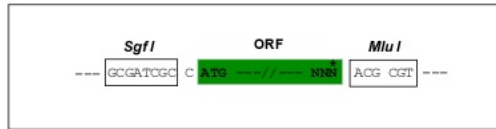
**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

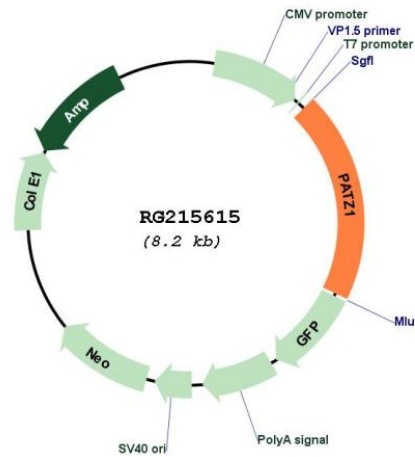
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_032052
<b>ORF Size:</b>	1611 bp
<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_032052.2</a>
<b>RefSeq Size:</b>	3747 bp
<b>RefSeq ORF:</b>	1614 bp
<b>Locus ID:</b>	23598
<b>UniProt ID:</b>	<a href="#">Q9HBE1</a>
<b>Cytogenetics:</b>	22q12.2
<b>Domains:</b>	BTB, AT_hook, zf-C2H2
<b>Protein Families:</b>	Transcription Factors

**Gene Summary:**

The protein encoded by this gene contains an A-T hook DNA binding motif which usually binds to other DNA binding structures to play an important role in chromatin modeling and transcription regulation. Its Poz domain is thought to function as a site for protein-protein interaction and is required for transcriptional repression, and the zinc-fingers comprise the DNA binding domain. Since the encoded protein has typical features of a transcription factor, it is postulated to be a repressor of gene expression. In small round cell sarcoma, this gene is fused to EWS by a small inversion of 22q, then the hybrid is thought to be translocated (t(1;22)(p36.1;q12). The rearrangement of chromosome 22 involves intron 8 of EWS and exon 1 of this gene creating a chimeric sequence containing the transactivation domain of EWS fused to zinc finger domain of this protein. This is a distinct example of an intra-chromosomal rearrangement of chromosome 22. Four alternatively spliced transcript variants are described for this gene. [provided by RefSeq, Jul 2008]