

## Product datasheet for **RG209243**

### ZNF281 (NM\_012482) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ZNF281 (NM_012482) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ZNF281
Synonyms:	GZP1; ZBP-99; ZBP99; ZNP-99
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG209243 representing NM\_012482  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

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**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

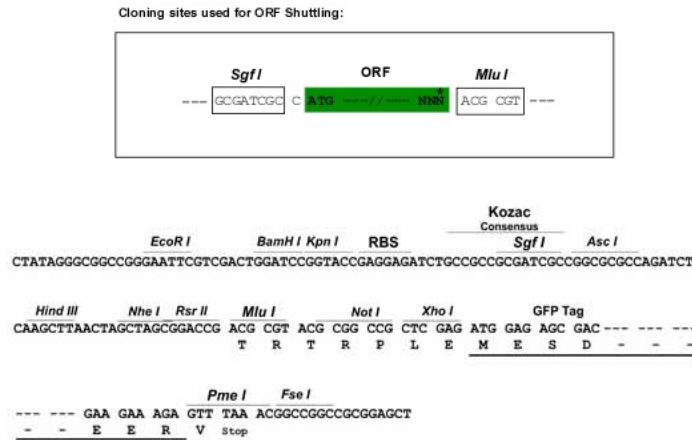
Protein Sequence: >RG209243 representing NM\_012482  
 Red=Cloning site Green=Tags(s)

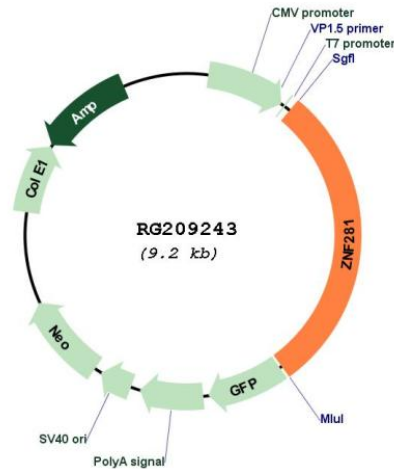
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 HHHHHHHHYGGLFAGAERSPLGGGEGGSHGVIQDLSILHQHVQQPAQHHRDVLSSSSRTDDHHGTE  
 EPKQDTNVKKAKRPKPE SQGIKAKRKPSASSKPSLVGDGEGAILSPSQKPHICDHCSAAFSSYHLRRHV  
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 QQYFSRTDRLKHRRTCGEVIVKGATSAEPGSSNHTNMGNLAVLSQGNTSSSRRTKSKSIAIENKEQKT  
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 GQKSLSGKPSGLGIVSNNVETIGLLQSTSGKQGQISSNYDDAMQFSKKRRYLPTASSNSAFSINVGHM  
 VSQQSVIQSAGVSLDNEAPLSLIDSSALNAEIKSCHDKSGIPDEVLQSILDQYSNKSESQKEDPFNIAE  
 PRVDLHTSGEHELVEENLSPGTQTPSNDKASMLQEYSKYLQQAPEKSTNASFTLGHGFQFVSLSSPLH  
 NHTLFPEKQIYTTSPLECGFQSVTSVLPSSLKPPFGMLFGSQPGLYLSALDATHQQLTPSQELDDLID  
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 SGRVPMFTITNSNGEVDHRVRTSVSDFSGYTMMMSDVSEPCSTRVKTPTSQSYR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_012482

**ORF Size:** 2685 bp

**OTI Disclaimer:** 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 [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<a href="#">NM_012482.3</a> , <a href="#">NP_036614.1</a>
RefSeq Size:	3535 bp
RefSeq ORF:	2688 bp
Locus ID:	23528
UniProt ID:	<a href="#">Q9Y2X9</a>
Cytogenetics:	1q32.1
Domains:	zf-C2H2
Protein Families:	ES Cell Differentiation/IPS, Stem cell - Pluripotency, Transcription Factors
Gene Summary:	Transcription repressor that plays a role in regulation of embryonic stem cells (ESCs) differentiation. Required for ESCs differentiation and acts by mediating autorepression of NANOG in ESCs: binds to the NANOG promoter and promotes association of NANOG protein to its own promoter and recruits the NuRD complex, which deacetylates histones. Not required for establishment and maintenance of ESCs (By similarity). Represses the transcription of a number of genes including GAST, ODC1 and VIM. Binds to the G-rich box in the enhancer region of these genes.[UniProtKB/Swiss-Prot Function]