

## Product datasheet for **RG221709**

### ZNF568 (NM\_198539) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ZNF568 (NM_198539) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ZNF568
Synonyms:	ZFP568
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG221709 ORF sequence, **codon optimized**.  
**Due to the complexity of NM\_198539, the ORF clone is codon optimized for mammalian Expression.**  
**The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.**

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGC**C

ATGACCTCCCAAAGCAGCGTAATCTCCAACCTCATGCGTCACAATGGAGCGGCTCAGTCATATGATGGAGA  
 GGAAGGCATGGTGCAGTCAGGAATCTGCACTGAGCGAAGAGGAAGAGGACACAACCCGGCCACTGGAAC  
 CGTTACGTTTAAAGACGTAGCGGTGACTTGACACAGGAGGAGTGGGAACAGATGAAGCCGGCGCAGCGG  
 AATCTTTACCGAGACGTAATGCTCGAGAACTACTTAATCTTGTGACTGTGGGATGCCAGGTCACCAAGC  
 CCGATGTAATTTTTAAACTCGAGCAGGAGGAAGAACCATGGGTGATGGAGGAGGAAATGTTCCGGCGCCA  
 CTGCCCGAAGTGTGGGAGGTGGATGAACAGATCAAAAAACAGCAAGAGACACTTGTGCGAAAGGTGACG  
 TCAATTAGTAAAAAGATACTGATAAAGGAGAAGGTGATCGAATGTAAAAAGTTCGAAAAATTTCCCTC  
 TCAGTTCGACATAGTGACCTCCAGGCAAAGCTTCTACGACTGTGATTCTCTGGATAAAGGACTGGAGCA  
 TAATTTGGATCTTCTGAGATATGAGAAAGGATGTGTACGGGAGAAGCAGTCAAACGAGTTTGCAAACCG  
 TTTTACCACTGCGCAAGTTATGTGGTGACCCCTTTAAGTGTAAACAGTCCGGTCCAGGATTCAGCCATA  
 AGTTCGATCTGATCCGGCAGGAGAATTCATGCCGGGAAAAGCCCTATGAATGTAAGAGTGTGGGAA  
 GGCATTTCTAGAAAAGAGAATCTGATTACTCAGAAAAATCCACACAGGCGAGAAAACCTATAAATGC  
 AACGAATGCGGGAAAGGCATTTATTAGATGAGTAACCTCATCAGACATCACCGGATCCACACAGGGGAAA  
 AACCATATGCATGTAAAGATTGCTGAAAAGCCTTCTCCAGAAAGCAATCTGATCGAGCACGAACGAAT  
 CCACACCGGCGAGAAAACCTACGAATGTAAGGAGTGCGGGAAGAGCTTTAGTCAAAGCAGAACCTGATT  
 GAGCATGAAAAATCCATACGGGCGAGAAGCCCTATGCTTGAACGAGTGTGGACGCGCTTCTCCCGGA  
 TGTCAAGCGTGACACTTCATATGCGCAGCCATACAGGAGAAAAGCCTTATAAATGTAATAAGTGTGGAAA  
 GGCTTTTAGTCAGTGTTCCGTCTTTATTATTATCATATGAGAAGCCATACGGGGAAAACCTACGTGTGT  
 AGTGAGTGCGGGAAAGCCTTCAGCCAGTCCAGTCTCTGACTGTCCACATGAGGAACACACCGCCGAGA  
 AGCCCTACGAATGTAAGGAATGTGGAAAGCATTACGAGAAAAGGAGAACTTGATCACACATCAAAGAT  
 CCATACGGGCGAAAACCATACGAATGCAGCGAGTGTGGTAAGGCGTTTATTAGATGAGTAATCTGATA  
 AGACACCAACGCATTCATACCGGCGAAAAGCCTATGCTTGTACCGTGTGCGGCAAAGCCTTCTCACAAA  
 AGAGCAACCTGACAGAGCACGAGAAAATCCACACAGGCGAAAAGCCTTACCATTGCAATCAATGCGGCAA  
 GGCTTTAGCCAGAGGCAGAACCTGCTTGAACGAGAAAAGATCCACACTGGGGAGAAAACCTTTCAAATGC  
 AATGAATGTGGGAAGGCCTTCAGTCGATTTTCATCATTGACTCTGCACGTAAGGTCCCACACCGGGGAAA  
 AACCGTACGAATGCAACAAATGTGGGAAGGCATTTCCAGTGTCTCTCTTGTATTATCCACATGAGATC  
 TCACACAGGCGAGAAGCCCTTTGAATGCAACGAGTGCGGAAAAGGCTTTTCTCAACGAGCCAGTCTGTCT  
 ATCCATAAACGAGGCCACACGGGCGAGAGACATCAGGTGTAC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG221709 representing NM\_198539  
 Red=Cloning site Green=Tags(s)

MTSQSSVISNSCVTMERLSHMMERKAWCSQESALSEEEEDTRPLETVTFKDVAVDLTQEWEQMKAQR  
 NLYRDVMLENYSNLVTVCQVTKPDVIFKLEQEEEPWVMEEMFGRHCPVWVDEQIKKQQETLVRKVT  
 SISKKILIKEKVIIECKKVAKIFPLSSDIVTSRQSFYDCDSLDKGLEHNLDLLRYEKGCVREKQSNFEGKP  
 FYHCASYVVTTPFKCNQCGQDFSHKFDLIRHERIHAGEKPYECKEKGKAFSRKENLITHQKIHTGEKPYK  
 NECGKAFIQMSNLI RHHR IHTGEKPYACKDCWKAFSQKSNLIEHERIHTGEKPYECKEKGKSF S QKQNL I  
 EHEKIHTGEKPYACNECGRAF SRMSSVTLHMRSHTGEKPYKCNKCGKAFSQCSVFI IHMRSHTGEKPYVC  
 SEC GKAFSQSSSLTVHMRNHTAEKPYECKEKGKAFSRKENLITHQKIHTGEKPYECSECGKAFIQMSNLI  
 RHQR IHTGEKPYACTVCGKAFSQKSNL TEHEKIHTGEKPYHCNQC GKAFSQRQNLLEHEKIHTGEKPFK  
 NECGKAFSRISLTLHVRSHTEKPYECNKCGKAFSQCSLLI IHMRSHTGEKPFECNECGKAFSQRASLS  
 IHKRGHTGERHQVY

TRTRPLE - GFP Tag - V

**Restriction Sites:**

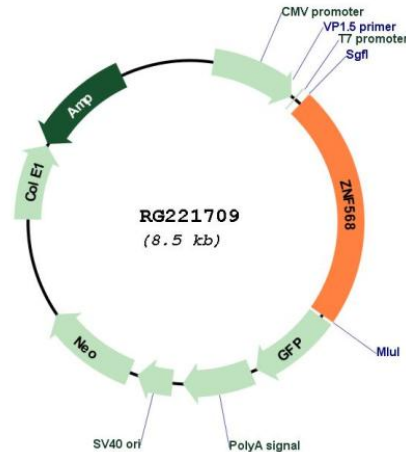
SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: NM\_198539

ORF Size: 1932 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\\_198539.2](#), [NP\\_940941.2](#)

RefSeq Size: 4096 bp

RefSeq ORF: 1935 bp

Locus ID: 374900

UniProt ID: [Q3ZCX4](#)

Cytogenetics: 19q13.12

Protein Families: Transcription Factors

**Gene Summary:** Has transcriptional repression activity, partially through the recruitment of the corepressor TRIM28 but has also repression activity independently of this interaction. Essential during embryonic development, where it acts as direct repressor of a placental-specific transcript of IGF2 in early development and regulates convergent extension movements required for axis elongation and tissue morphogenesis in all germ layers. Also important for normal morphogenesis of extraembryonic tissues including the yolk sac, extraembryonic mesoderm and placenta. May enhance proliferation or maintenance of neural stem cells.  
[UniProtKB/Swiss-Prot Function]