

Product datasheet for **RG201811**

ZNF207 (NM_001032293) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZNF207 (NM_001032293) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ZNF207
Synonyms:	BuGZ; hBuGZ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG201811 representing NM_001032293
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTCGCAAGAAGAAGAAGCAGCTGAAGCCGTGGTCTGGTATTGTAATAGAGATTTTGTATGATGAGA
 AGATCCTTATTCAGCACAAAAAGCAAAGCATTAAATGCCATATATGTCACAAGAAATTTGATACAGG
 ACCTGGCTTAGCTATTCATTGCATGCAGGTACATAAAGAAACAATAGATGCCGTACCAAATGCAATACCT
 GGAAGAACAGACATAGAGTTGGAATATATGGTATGGAAGGTATTCAGAAAAAGACATGGATGAAAGAC
 GACGACTTCTTGAACAGAAAAACAAGAAAGTCAAAAAAGAAGCAACAAGATGATTCTGATGAATATGA
 TGATGACGACTCTGCAGCCTCACTTCATTTAGCCACAGCCTGTTCAACCTCAGCAAGTTATATTCT
 CCAATGGCACAGCCAGGACTGCCACCAGTACCAGGAGCACCAGGAATGCCTCCAGGCATACCTCCATTAA
 TGCCAGGTGTTCTCTCTGATGCCAGGAATGCCACCAGTTATGCCAGGCATGCCACCTGGATTGCATCA
 TCAGAGAAAATACACCCAGTCATTTGCGGTGAAAACATAATGATGCCAATGGGTGGAATGATGCCACCT
 GGACCAGGAATACCACCTCTGATGCCTGGAATGCCACCAGGTATGCCCCACCTGTTCCAGTCTCGAA
 TTCTCCAATGACTCAAGCACAGGCTGTTTCAGCGCCAGGTATTCTTAATAGACCACCTGCACCAACAGC
 AACTGTACCTGCCCCACAGCCTCCAGTTACTAAGCCTCTTTCCCGAGTCTGGACAGGCTCAGGCAGCT
 GTCCAAGGACCTGTTGGTACAGATTTCAAACCTTAAATAGTACCCTGCAACAACACTACAGAACCCCAA
 AGCCTACATTCCTGCTTATACACAGTCTACAGCTTCAACAACACTAGTACAACAAATAGTACTGCAGCTAA
 ACCAGCGGCTTCAATAACAAGTAAGCCTGCTACACTTACAACAACACTAGTGAACCAAGTAAAGTTGATCCAT
 CCAGATGAGGATATATCCCTGGAAGAGAGAAGGGCACAGTTACCTAAGTATCAACGTAATCTTCTCGGC
 CAGGACAGGCCCCCATCGGTAATCCACCAGTTGGACCAATTGGAGGTATGATGCCACCACAGCCAGGCAT
 CCCACAGCAACAAGGAATGAGACCCCAATGCCACCTCATGGTCAGTATGGTGGTATCATCAAGGCATG
 CCAGGATACCTTCTGGTCTATGCCCCGATGGGCAGGGACCCCAATGGTGGCCCTTACCAGGGTG
 GCCTCTCGACCTCCGATGGGAATGAGACCTCTGTAATGTCGCAAGGTGGCCGTTAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

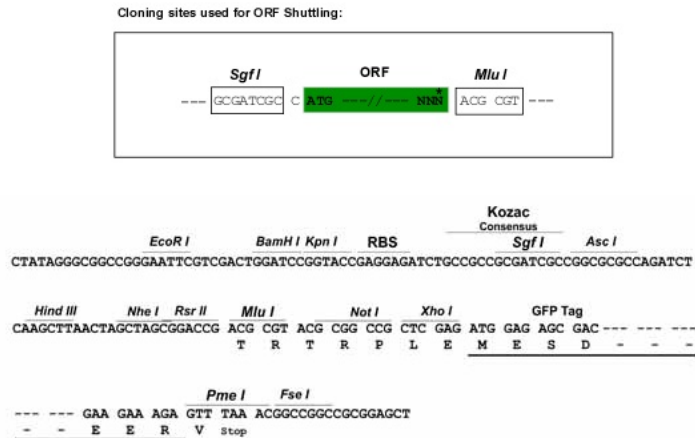
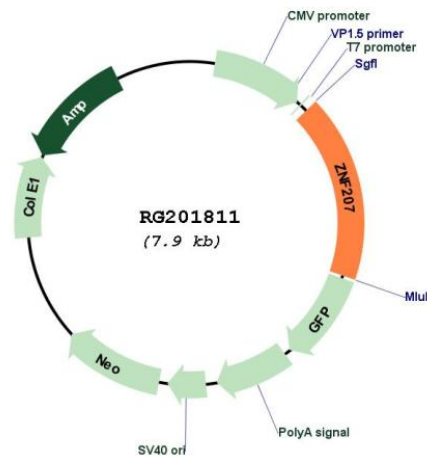
>RG201811 representing NM_001032293
 Red=Cloning site Green=Tags(s)

MGRKKKKQLKPCWCYCNRDFDDEKILIQHQKAKHFKCHICHKLYTGPGLAIHQMVKETIDAVPNAIP
 GRTDIELEIYGMETIPEKDMERRRLLKQTKESQKKKQDDSDYDDDDSAASTSFQPPVQPPQGGYIP
 PMAQPLPPVPGAPGMPPGIPPLMPGVPLMPGMPPVMPGMPPGLHHQRKYTQSFGENIMMPMGMPP
 GPGIPPLMPGMPPVPRGIPPMQAQAVSAPGILNRPPAPTATVPAPQPPVTKPLFPSAGQAQAA
 VQGPVGTDFKPLNSTPATTEPPKPTFPAYTQSTASTTSTNSTAAKPAASITSKPATLTTTSATSKLIH
 PDEDISLEERRAQLPKYQRNLPRPGQAPIGNPPVPIGMMPPQPGIPQQQGMPPMPHGGYGGHHQGM
 PGYLPGAMPPYGGPPMPPYQGGPPRPPMGRPPVMSQGGRY

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001032293

ORF Size: 1389 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:	<ol style="list-style-type: none">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:	<u>NM_001032293.2, NP_001027464.1</u>
RefSeq Size:	2167 bp
RefSeq ORF:	1392 bp
Locus ID:	7756
UniProt ID:	<u>O43670</u>
Cytogenetics:	17q11.2
Protein Families:	Transcription Factors
Gene Summary:	<p>Kinetochores- and microtubule-binding protein that plays a key role in spindle assembly (PubMed:24462186, PubMed:24462187, PubMed:26388440). ZNF207/BuGZ is mainly composed of disordered low-complexity regions and undergoes phase transition or coacervation to form temperature-dependent liquid droplets. Coacervation promotes microtubule bundling and concentrates tubulin, promoting microtubule polymerization and assembly of spindle and spindle matrix by concentrating its building blocks (PubMed:26388440). Also acts as a regulator of mitotic chromosome alignment by mediating the stability and kinetochore loading of BUB3 (PubMed:24462186, PubMed:24462187). Mechanisms by which BUB3 is protected are unclear: according to a first report, ZNF207/BuGZ may act by blocking ubiquitination and proteasomal degradation of BUB3 (PubMed:24462186). According to another report, the stabilization is independent of the proteasome (PubMed:24462187).[UniProtKB/Swiss-Prot Function]</p>