

## Product datasheet for **SC316390**

### ZNF207 (NM\_001098507) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ZNF207 (NM_001098507) Human Untagged Clone
Tag:	Tag Free
Symbol:	ZNF207
Synonyms:	BuGZ; hBuGZ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >SC316390 representing NM\_001098507.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGGTGCGAAGAAGAAGAAGCAGCTGAAGCCGTGGTGGTATTGTAATAGAGATTTTGTATGATGAG
AAGATCCTTATTAGCACCAAAAAGCAAAGCATTTTAAATGCCATATATGTCACAAGAAATGTATACA
GGACCTGGCTTAGCTATTGATGATGCAGGTACATAAAGAAACAATAGATGCCGTACCAATGCAATA
CCTGGAAGAACAGACATAGAGTTGAAAATATATGGTATGGAAGGTATTCCAGAAAAGACATGGATGAA
AGACGACGACTTCTTGAACAGAAAACACAAGAAAGTCAAAAAAGAAGCAACAAGATGATTCTGATGAA
TATGATGATGACGACTCTGCAGCCTCAACTTCATTTAGCCACAGCCTGTTCAACCTCAGCAAGTTAT
ATTCTCCAATGGCACAGCCAGGACTGCCACCAGTACCAGGAGCACCAGGAATGCCTCCAGGCATACCT
CCATTAATGCCAGGTGTTCTCTCTGATGCCAGGAATGCCACCAGTTATGCCAGGCATGCCACCTGGA
TTGCATCATCAGAGAAAATACACCCAGTCATTTTGGCGGTAAAACATAATGATGCCAATGGGTGGAATG
ATGCCACCTGGACCAGGAATACCACCTCTGATGCCTGGAATGCCACCAGGTATGCCCCACCTGTTCCA
CGTCTGGAAATCCTCCAATGACTCAAGCACAGGCTGTTTCAGCGCCAGGTATTCTTAATAGACCACCT
GCACCAACAGCAACTGTACCTGCCCCACAGCCTCCAGTTACTAAGCCTCTTTTCCCAGTCTGGACAG
ATGGGGACACCTGTCACAAGCTCAAGTACAGCTTCATCCAATTCAGAAAGTCTGTCTGCATCTTCTAAA
GCTCTGTTTCTAGCACAGCACAAAGCTCAGGCAGCTGTCCAAGGACCTGTTGGTACAGATTTCAAACCC
TTAAATAGTACCCTGCAACAACACAGAACCCCAAAGCCTACATTCCTGCTTATACACAGTCTACA
GCTTCAACAACACTAGTACAACAAATAGTACTGCAGCTAAACCAGCGGCTTCAATAACAAGTAAAGCCTGCT
ACACTTACAACAACACTAGTGAACCAGTAAGTTGATCCATCCAGATGAGGATATATCCCTGGAAGAGAGA
AGGGCACAGTTACCTAAGTATCAACGTAATCTTCTCGCCAGGACAGGCCCCCATCGGTAAATCCACCA
GTTGGACCAATTGGAGGTATGATGCCACCACAGCCAGGCATCCCACAGCAACAAGGAATGAGACCCCA
ATGCCACCTCATGGTCAGTATGGTGGTCATCATCAAGGCATGCCAGGATACCTTCTGGTCTATGCC
CCGTATGGGCAGGGACCGCAATGGTGCCCTTACCAGGGTGGGCCTCTCGACCTCCGATGGGAATG
AGACCTCCTGTAATGTCGCAAGGTGGCCGTTACTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001098507

**Insert Size:** 1485 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001098507.1](#)

**RefSeq Size:** 2333 bp

**RefSeq ORF:** 1485 bp

**Locus ID:** 7756

**UniProt ID:** [O43670](#)

**Cytogenetics:** 17q11.2

**Protein Families:** Transcription Factors

**MW:** 52.7 kDa

**Gene Summary:** 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]  
Transcript Variant: This variant (3) represents the longest transcript and encodes the longest isoform (c).