

Product datasheet for **SC117945**

ZNF207 (NM_003457) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ZNF207 (NM_003457) Human Untagged Clone
Tag:	Tag Free
Symbol:	ZNF207
Synonyms:	BuGZ; hBuGZ
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC117945 sequence for NM_003457 edited (data generated by NextGen Sequencing)

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ATGGGTCGCAAGAAGAAGAAGCAGCTGAAGCCGTGGTGTGCTGGTATTGTAATAGAGATTTT
GATGATGAGAAGATCCTTATTCAGCACCAAAAAGCAAAGCATTTTAAATGCCATATATGT
CACAAAGAAATTGTATACAGGACCTGGCTTAGCTATTCATTGCATGCAGGTACATAAAGAA
ACAATAGATGCCGTACCAAAATGCAATACCTGGAAGAACAGACATAGAGTTGGAATATAT
GGTATGGAAGGTATCCAGAAAAAGACATGGATGAAAGACGACGACTTCTTGAACAGAAA
ACACAAGAAAGTCAAAAAAGAAGCAACAAGATGATTCTGATGAATATGATGATGACGAC
TCTGCAGCCTCAACTTCATTTACGCCACAGCCTGTTCAACCTCAGCAAGTTATATTCTT
CCAATGGCACAGCCAGGACTGCCACCAGTACCAGGAGCACCAGGAATGCCTCCAGGCATA
CCTCCATTAATGCCAGGTGTTCTCCTCTGATGCCAGGAATGCCACCAGTTATGCCAGGC
ATGCCACCTGGAATGATGCCAATGGGTGGAATGATGCCACCTGGACCAGGAATACCACCT
CTGATGCCTGGAATGCCACCAGGTATGCCCCACCTGTTCCACGTCTGGAATTCCTCCA
ATGACTCAAGCACAGGCTGTTTCAGCGCCAGGTATTCTTAATAGACCACCTGCACCAACA
GCAACTGTACCTGCCCCACAGCCTCCAGTTACTAAGCCTCTTTTCCCCAGTGCTGGACAG
ATGGGGACACCTGTCACAAGCTCAAGTACAGCTTCATCCAATTCAGAAAGTCTGTCTGCA
TCTTCTAAAGCTCTGTTTCTTAGCACAGCAAGCTCAGGCAGCTGTCCAAGGACCTGTT
GGTACAGATTTCAAACCTTAAATAGTACCCCTGCAACAACACTACAGAACCCCAAAGCCT
ACATTCCTTGCTTATACACAGCTACAGCTTCAACAACACTAGTACAACAAATAGTACTGCA
GCTAAACCAGCGGCTTCAATAACAAGTAAGCCTGCTACACTTACAACAACACTAGTGAACC
AGTAAGTTGATCCATCCAGATGAGGATATATCCCTGGAAGAGAGAAGGGCACAGTTACCT
AAGTATCAACGTAATCTTCTCGGCCAGGACAGGCCCCCATCGGTAATCCACCAGTTGGA
CCAAATGGAGGTATGATGCCACCACAGCCAGGCATCCCACAGCAACAAGGAATGAGACCC
CCAATGCCACCTCATGGTCAGTATGGTGGTCATCATCAAGGCATGCCAGGATACCTTCTT
GGTGCTATGCCCCGTATGGGCAGGACCGCAATGGTGCCCCCTTACCAGGGTGGGCCCT
CCTCGACCTCCGATGGGAATGAGACCTCCTGTAATGTCGCAAGGTGGCCGTTACTGA

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Clone variation with respect to NM_003457.3

5' Read Nucleotide Sequence: >OriGene 5' read for NM_003457 unedited

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NGGGGGTTCACATTTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACGAGGCGG
GGAACGAGGCCGTGCGCCATTTTGTGTCTGCTTCTGTGGGACGTGGTGGTAGCCGTTGG
GTTGGGAAAGTGAGGGATTTTGGCCTCGTTTCTCCTGCTTCTTTTCTCCTCCCTTTTAC
TTTGCCGTTAGAACACAGTTATGGGTCGCAAGAAGAAGAAGCAGCTGAAGCCGTGGTGTCT
GGTATTGTAATAGAGATTTTGTATGATGAGAAGATCCTTATTCAGCACCAAAAAGCAAAGC
ATTTTAAATGCCATATATGTCACAAGAAATGTATACAGGACCTGGCTTAGCTATTCATT
GCATGCAGGTACATAAAGAAACAATAGATGCCGTACCAAAATGCAATACCTGGAAGAACAG
ACATAGAGTTGGAAATATATGGTATGGAAGGTATTCCAGAAAAAGACATGGATGAAAGAC
GACGACTTCTTGAACAGAAAACACAAGAAAGTCAAAAAAGAAGCAACAAGATGATTCTG
ATGAATATGATGATGACGACTCTGCAGCCTCAACTTCATTTACGCCACAGCCTGTTCAAC
CTCAGCAAGGTTATATTCCTCCAATGGCACAGCCAGGACTGCCACCAGTACCAGGAGCAC
CAGGAATGCCTCCAGGCATACCTCCATTAATGCCAGGTGTTCTCCTCTGATGCCAGGAA
TGCCACCAGTTATGCCAGGCATGCCACCTGGATTGCATCATCAGAGAAAATACACCCAGT
CATTNNTGCGGTGAAAACATAATGATGCCAATGGGNTGGAATGATGCCACCTGGACCAGG
AATACCACCTCTGATGCCCTGGATGCCACCAGGTATGCCCCACCTGNTCCACGTNCTGG
AATTNCTNCATGACTCAGCCC

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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_003457 unedited NGGGTTTACTATGNNACCGCGGCCGCATNCTANGATCGAGTTTTTTTTTTTTTTTTTTAA ATTTTTCTCTCATTTTATTACAATGAAGTTTAAACAGTACAGAAAAGTCACATGACCTTGG TGGGTCAGATTTCTTAAACCCTGCAACATGAGGAACTCTAAATACATTAATATATGTTA CACATTCAGACTTCCAATGTACAAGTACTTGAAAACAGTTACAGCCCTCACCAAGCTAGG TTGGGGACATGAAGTCCAACAGCATCTGAAATGCTGTGAAGGCAAACCTTACAAATAGCA ATGTAAGCTTACAGAACTTGCCTTTACTAGGGTGGTATGTTTCATGTAATCCAGCGCCTT CACAATTTAACGAACCAATTTACTATACTTCACTTCTAAAAACCTAGATGAAACATGAA AAAGAAGCCATACAGTATAAATTGCAACTTCAGGAAAAGTTCCTGCTTTATTATCCAAA TAATTTTTCCCATGTAATAAATGTCCAATAGTTCCTGGTATGTGGGAAGATAATGTTT GTTAAAGTCACAATGAAGCCTTATTGACGGAAGCTTGGCTATATAAACAGCACAAAGTTGA GAAAAGGTTTAACTCTCAAACCTATTAGACTGGATGAAGTAAGATCAGTAACGGCCACCT TGCGACATTACAGGAGGTCTCATTCCCATCCGGAGGTGAGGAGGCCACCTGGTAAGA TGGCACCATTGGGCGGTCCCTGCCCCATACGGGGCATAGCACCCAGAAAGGATCCTGGCA TGCCTTGATGATACCACCTACTGACCATGAGGTGGCATTGGGGGTCTCATTCTTGTTG CTGGGGGAGCCCTGGCGTGGGGGCATCATAACTCCAATTGTGCCATGGTGGGATAACCAG
Restriction Sites:	NotI-NotI
ACCN:	NM_003457
Insert Size:	2250 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 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
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:	NM_003457.1 , NP_003448.1
RefSeq Size:	2347 bp
RefSeq ORF:	1437 bp

Locus ID:	7756
UniProt ID:	O43670
Cytogenetics:	17q11.2
Domains:	zf-C2H2
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> <p>Transcript Variant: This variant (1) lacks an in-frame exon in the coding region, compared to variant 3. It encodes isoform a, which is shorter than isoform c.</p>