

## Product datasheet for **RG220374**

### **BAZ2A (NM\_013449) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	BAZ2A (NM_013449) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BAZ2A
Synonyms:	TIP5; WALp3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220374 representing NM_013449 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAATGGAGGCAAACGACCATTTAACTTTACTGGCCTTCCCCCTGCACCTGCTGCCTCAGGACTGA  
AACCTCTCCTCCTCAGGGGAGGGCCTCTACACTAACGGGTCTCCCATGAACTCCCCAGCAAGGAA  
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG220374 representing NM\_013449  
 Red=Cloning site Green=Tags(s)

MEMEANDHFNTGLPPAPAASGLKPSPPSSGELYTNGSPMNFQQGKSLNGDVNVNGLSTVSHTTTSGIL  
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 SGIHPDEAAEKEMTSVAENGTGLVGSLELEEEQPELKMCGYNGSVSVESLHQEVSVLVPDPTVSLDD  
 PSHLPDQLEDTPILSEDSLEPFNSLAPEPVSGGLYGIDDELMGAEDKLPLEDSPVISALDCPSLNNATA  
 FLLADDSTSTISIFASPTSPVVLGESVLQDNFSLNNGSDAEQEEMETQSSDFPPSLTQPAPDQSTIQ  
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 RPRKTKPGSMQPRHLKSPVRGQDSEQPQAQLQPEAQLHAPAQPQPQLQLQLQSHKGFLEQEGSPLSLGQS  
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 LGQPKRRGRPPSKFFKQMEQRYLTQLTAQPVPEMCSGWWWIRDPEMLDAMLKALHPRGIREKALHKHLN  
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 PSPDSTREDLAYCEHLSDSQEDITWRGRGREGLAPQRKTTNPLDLAVMRLAALEQNVERRYLREPLWPTH  
 EVVLEKALLSTPNGAPEGTTTEISYEITPRIRVWRQTLERCRSAAQVCLCLGQLERSIAWEKSVNKVTCL  
 VCRKGDNDEFLLLCDGDRGCHIYCHRPKMEAVPEGDWFCVLAQQVEGEFTQKPGFPKRGQKRKSGYS  
 LNFSEGDGRRRRVLLRGRESAAGPRYSEGLSPSKRRRLSMRNHSDLTFCEIILMEMESHDAAWPFLE  
 PVNPRLVSGYRRIKKNPMDFSTMRELLRGGYTSSEFAADALLVFDNCQTFNEDDSEVGKAGHIMRRFF  
 ESRWEEFYQKQANL

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI



<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_013449.4</a>
<b>RefSeq Size:</b>	8934 bp
<b>RefSeq ORF:</b>	5718 bp
<b>Locus ID:</b>	11176
<b>UniProt ID:</b>	<a href="#">Q9UIF9</a>
<b>Cytogenetics:</b>	12q13.3
<b>Domains:</b>	AT_hook, BROMO, MBD, PHD, DDT
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	Essential component of the NoRC (nucleolar remodeling complex) complex, a complex that mediates silencing of a fraction of rDNA by recruiting histone-modifying enzymes and DNA methyltransferases, leading to heterochromatin formation and transcriptional silencing. In the complex, it plays a central role by being recruited to rDNA and by targeting chromatin modifying enzymes such as HDAC1, leading to repress RNA polymerase I transcription. Recruited to rDNA via its interaction with TTF1 and its ability to recognize and bind histone H4 acetylated on 'Lys-16' (H4K16ac), leading to deacetylation of H4K5ac, H4K8ac, H4K12ac but not H4K16ac. Specifically binds pRNAs, 150-250 nucleotide RNAs that are complementary in sequence to the rDNA promoter; pRNA-binding is required for heterochromatin formation and rDNA silencing (By similarity).[UniProtKB/Swiss-Prot Function]