

## Product datasheet for **RG239894**

### **BUB1 (NM\_001278617) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	BUB1 (NM_001278617) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BUB1
Synonyms:	BUB1A; BUB1L; hBUB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG239894 representing NM\_001278617.  
 Blue=ORF Red=Cloning site Green=Tag(s)

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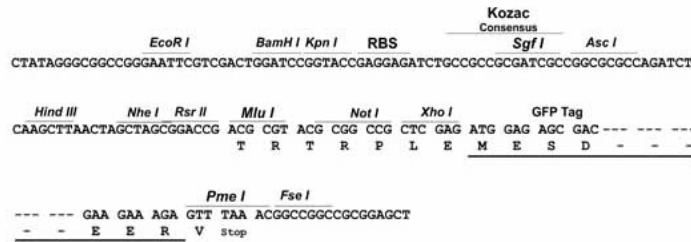
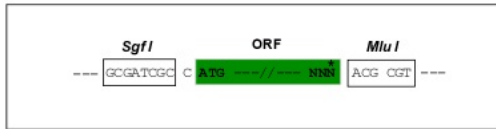
**Protein Sequence:** >Peptide sequence encoded by RG239894  
 Blue=ORF Red=Cloning site Green=Tag(s)

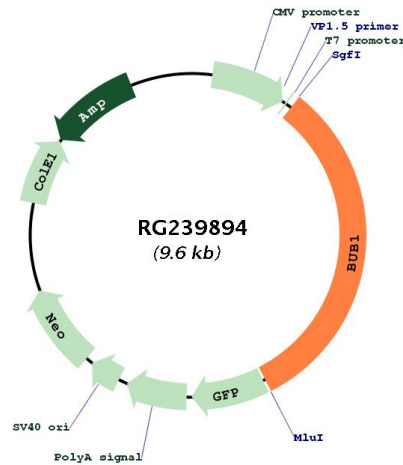
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**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**


<b>ACCN:</b>	NM_001278617
<b>ORF Size:</b>	3084 bp
<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>RefSeq:</b>	<a href="#">NM_001278617.1</a> , <a href="#">NP_001265546.1</a>
<b>RefSeq Size:</b>	3465 bp
<b>RefSeq ORF:</b>	3087 bp
<b>Locus ID:</b>	699
<b>UniProt ID:</b>	<a href="#">O43683</a>
<b>Cytogenetics:</b>	2q13
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Cell cycle, Oocyte meiosis, Progesterone-mediated oocyte maturation
<b>MW:</b>	116.3 kDa

**Gene Summary:**

This gene encodes a serine/threonine-protein kinase that play a central role in mitosis. The encoded protein functions in part by phosphorylating members of the mitotic checkpoint complex and activating the spindle checkpoint. This protein also plays a role in inhibiting the activation of the anaphase promoting complex/cyclosome. This protein may also function in the DNA damage response. Mutations in this gene have been associated with aneuploidy and several forms of cancer. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]