

## Product datasheet for **RR203133**

### **Bves (NM\_001077590) Rat Tagged ORF Clone**

#### Product data:

Product Type: Expression Plasmids  
Product Name: Bves (NM\_001077590) Rat Tagged ORF Clone  
Tag: Myc-DDK  
Symbol: Bves  
Synonyms: Popdc1  
Vector: pCMV6-Entry (PS100001)  
E. coli Selection: Kanamycin (25 ug/mL)  
Cell Selection: Neomycin  
ORF Nucleotide Sequence: >RR203133 representing NM\_001077590  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGAATTTTACGGAGCCAGCCACTGGCGCAATCAACTGTGGTGGGTTTTCTGCCTGAGTTAGAAAGTC  
TCACACCCGTGCCTTCCAATGAGACCAGTTGTGAAAACGGCGGAGGTTACCATCTGGTGTTCACGC  
GGCCAACGTTTGCTCGCAGTTGGTTTGCTAATCCCACCACTCTCCACCTCCATATGATACTGCTCAGA  
GTGATGCTGTCTATAGGATGTACCCTCTACGTGGTCTGGGCCACTCTCTACCGCTGTGCCTGGATATGA  
TGATCTGGAACCTCGGTGTTCTTGGGTATCAATATTTTGCATCTTTTCATATCTTTTGTACAAGAAAAGACC  
GGTCAAGATTGAAAAGGACCTGGGCGGTGTCTACCACCGACTGTTTGAACCCCTCCGAGTCCCTCCGGAT  
TTGTTTAGAAGGCTAACTGGACAGTTTTGTGTGATCCAGACCTTGAAGGGGCCAGGTTTATGCCACGG  
AGGACAAAACCTCAGTTGATGACCGTCTTAGCATTCTCTAAAGGGAAGAATGAAGGTCTCCTATCGAGG  
ACATTTTCTGCATAACATTTACCCGTGTGCCTTTATAGATTCTCCTGAATTCAGATCAACGCAGATGCAC  
AAGGGTGAGAAATCCAGGTCACCATTGTTGCGGACGATAACTGCAGTTTTTATGCTGGTCGAGAGAAA  
GACTGACGTACTTTCTGGAGTCAGAGCCTTTTCTGTATGAAATTTTAGTACCTTATAGGAAAAGACAT  
CACAAATAAGCTGTACTCACTGAATGACCCACCTTAAATGATAAAAAAGTGAAGAAGTTGGAGCCCCAG  
ATGAGCCTCAGCACACAGATCTCCATGCTGGAGATGAGGAACAGCATCACTAGCTCCAGGCACATCGAGG  
ACGGCCTCCACCCTTCTGCGGGCTCCTCCAGCACGGCTTCTCTCCCATGTCTCCCGCAGCAGCG  
AGCCTCTCCAAGATGAAGCCAATCGAGGAAGGGCTAGAAGATGACGATGAGGTCTTTGTCCGGTGTCT  
CCAGCTCATCAGTTGCCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR203133 representing NM\_001077590  
 Red=Cloning site Green=Tags(s)

MNFTEPSPLAQSTVVGFLEPELESLTPVPSNETSCENWREVHHLVFHAANVCFVGLLIPTTLHLHMILLR  
 VMLSIGCTLYVVWATLYRCALDMMIWNVSFLGINILHLSYLLYKRPVKIEKDLGGVYHRLFELRVPPD  
 LFRRLTGQFCVIQTLKRGQVYATEDKTSVDDRLSILLKGRMKVSYRGHFLHNIYPCAFIDSPEFRSTQMH  
 KGEKFQVTIVADDNCRFLCWSRERLTYFLESEPFLEYEIFYLIGKDITNKLYSLNDPTLNDKVKKLEPQ  
 MSLSTQISMLEMRNSITSSSDIEDGLHHFLRGSSSTASLPMSSPQQRASPKMKPIEEGLEDDDEVFVPS  
 PAHQLP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

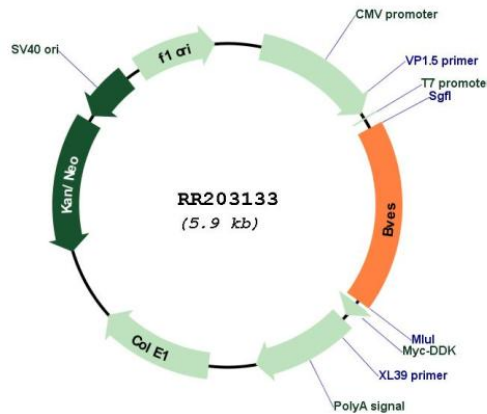
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001077590

<b>ORF Size:</b>	1068 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>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_001077590.1</a> , <a href="#">NP_001071058.1</a>
<b>RefSeq Size:</b>	1485 bp
<b>RefSeq ORF:</b>	1071 bp
<b>Locus ID:</b>	365603
<b>UniProt ID:</b>	<a href="#">Q3BCU4</a>
<b>Cytogenetics:</b>	20q13
<b>MW:</b>	40.9 kDa
<b>Gene Summary:</b>	Cell adhesion molecule involved in the establishment and/or maintenance of cell integrity. Involved in the formation and regulation of the tight junction (TJ) paracellular permeability barrier in epithelial cells. Plays a role in VAMP3-mediated vesicular transport and recycling of different receptor molecules through its interaction with VAMP3. Plays a role in the regulation of cell shape and movement by modulating the Rho-family GTPase activity through its interaction with ARHGEF25/GEFT. Induces primordial adhesive contact and aggregation of epithelial cells in a Ca(2+)-independent manner. Important for skeletal muscle and heart development. Also involved in striated muscle regeneration and repair and in the regulation of cell spreading (By similarity). Important for the maintenance of cardiac function. Plays a regulatory function in heart rate dynamics mediated, at least in part, through cAMP-binding and, probably, by increasing cell surface expression of the potassium channel KCNK2 and enhancing current density. Is a caveolae-associated protein important for the preservation of caveolae structural and functional integrity as well as for heart protection against ischemia injury (By similarity).[UniProtKB/Swiss-Prot Function]