

## Product datasheet for **RC204200**

### **BIGM103 (SLC39A8) (NM\_022154) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	BIGM103 (SLC39A8) (NM_022154) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BIGM103
Synonyms:	BIGM103; CDG2N; LZT-Hs6; PP3105; ZIP8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC204200 representing NM\_022154  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCCCGGGTGCGCGGTGGCCGGGCTCCTGTTGCTGGCGCCGCGGCCTCGGAGGAGTGGCGGAGG  
 GGCCAGGGCTAGCCTTCAGCGAGGATGTGCTGAGCGTGTTCGGCGGAATCTGAGCCTGTCGGCGCGCA  
 GCTCCAGCACTTCTGGAGCAGATGGGAGCCGCTCCCGCGTGGGCGTCCCGGAGCCTGGCCAGCTGCAC  
 TTCAACCAGTGTAACTGCTGAAGAGATCTTTCCCTTCATGGCTTTCAAATGCTACCCAAATAACCA  
 GCTCCAAATTCTGTCTGTCCAGCAGTCTTACAGCAATTGAACTTTCACCCATGTGAGGATCGGCC  
 CAAGCACAAAACAAGACCAAGTCATTTCAGAAAGTTGGGGATATGGATTCTGTGCTGAGCATTATAAT  
 CTGGCATCTCCTCGGATTGATTTGACTCCACTGATAAAGAAATCTTATTTCCAAAGATTTGACCT  
 TTTTGTGGGGCTGGCTATTGGGACTCTTTTTCAAATGCAATTTCCAACCTATTCCAGAGGCATTGG  
 ATTTGATCCCAAAGTCGACAGTTATGTTGAGAAGGCAGTTGCTGTGTTTGGTGGATTTACCTACTTTTC  
 TTTTTGAAAGAATGCTAAAGATGTTATTAAGACATATGGTCAGAATGGTCATACCCACTTTGAAATG  
 ATAACCTTTGGTCCTCAAGAAAAAATCATCAACCTAAAGCATTACCTGCCATCAATGGTGTGACATGCTA  
 TGCAAATCCTGCTGTACAGAAGCTAATGGACATATCCATTTGATAATGTCAGTGTGGTATCTCTACAG  
 GATGGAAAAAAGAGCCAAGTTCATGTACCTGTTTGAAGGGGCCAAACTGTCAGAAATAGGGACGATTG  
 CCTGGATGATAACGCTCTGCGATGCCCTCCACAATTTTCATCGATGGCCTGGCGATTGGGGCTTCTGCAC  
 CTTGCTCTCCTTCAGGGACTCAGTACTCCATAGCAATCCTATGTGAGGAGTTTCCCCACGAGTTAGGA  
 GACTTGTGATCCTACTCAATGCAGGGATGAGCACTCGACAAGCCTTGTATTCAACTTCTTTCTGCAT  
 GTTCTGCTATGTTGGGCTAGCTTTTGGCATTGTTGGTGGCAACAATTTGCTCCAAATATATATTTG  
 ACTTGCTGGAGGCATGTTCTCTATATTTCTGCGCAGATATGTTTCCAGAGATGAATGATATGCTGAGA  
 GAAAAGGTAAGTGAAGAAAAACCGATTTACCTTCTCATGATTGAGAATGCTGGAATGTTAACTGGAT  
 TCACAGCCATTCTACTATTACCTTGTATGACAGGAGAAATCGAATTGGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204200 representing NM\_022154  
 Red=Cloning site Green=Tags(s)

MAPGRAVAGLLLLAAAGLGGVAEGPGLAFSEDVLSVFGANLSLSAAQLQHLLLEQMGAASRVGVPEPQLH  
 FNQCLTAEEIFSLHGFSNATQITSSKFSVICPAVLQQLNFHPCEDRPHKTRPSHSEVWGYGFLSVTIIN  
 LASLLGLILTPLIKKSYFPKILTFVGLAIGTLFSNAIFQLIPEAFGFDPKVDSYVEKAVAVFGGFYLLF  
 FFERMLKMLLKYQNGHTHFGNDNFGPQEKTHQPKALPAINGVTCYANPAVTEANGHIHFDNVSVSLQ  
 DGKKEPSSCTCLKGPKLSEIGTIAWMITLCDALHNFIDGLAIGASCTLSLLQGLSTSIAILCEEFPHELG  
 DVFILLNAGMSTRQALLFNFLSACSCYVGLAFGILVGNFAPNIIIFALAGGMFLYISLADMFPENMDMLR  
 EKVTGRKTDFTFFMIQNAGMLTGFTAILLITLYAGEIELE

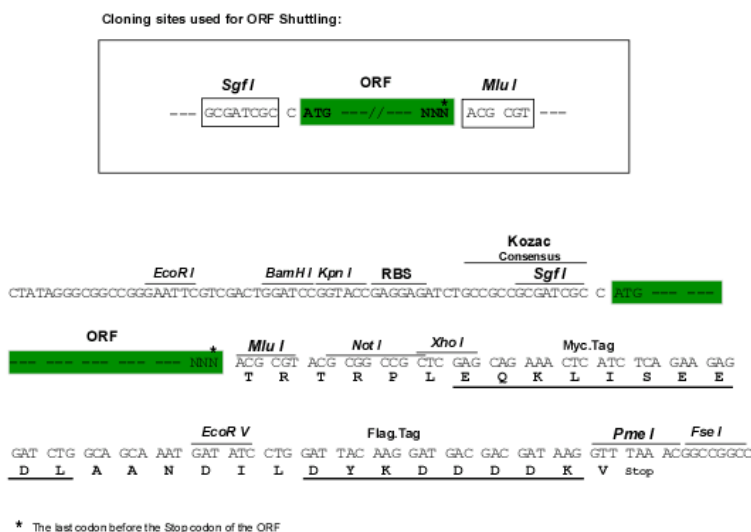
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2413\\_c06.zip](https://cdn.origene.com/chromatograms/mg2413_c06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_022154

**ORF Size:** 1380 bp

**OTI Disclaimer:** 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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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\\_022154.5](#), [NP\\_071437.3](#)

**RefSeq Size:** 3309 bp

**RefSeq ORF:** 1383 bp

**Locus ID:** 64116

**UniProt ID:** [Q9C0K1](#)

**Cytogenetics:** 4q24

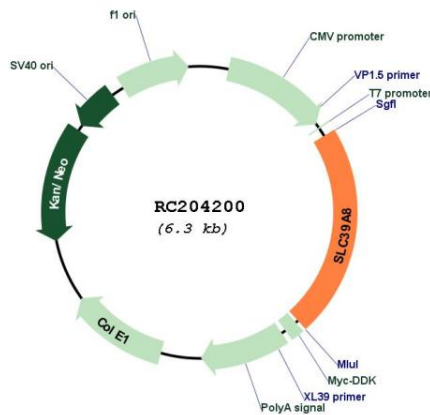
**Domains:** Zip

**Protein Families:** Transmembrane

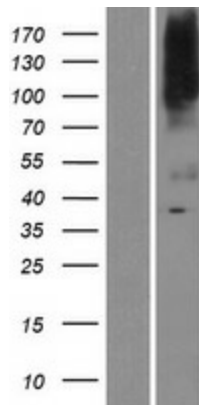
**MW:** 49.5 kDa

**Gene Summary:** This gene encodes a member of the SLC39 family of solute-carrier genes, which show structural characteristics of zinc transporters. The encoded protein is glycosylated and found in the plasma membrane and mitochondria, and functions in the cellular import of zinc at the onset of inflammation. It is also thought to be the primary transporter of the toxic cation cadmium, which is found in cigarette smoke. Multiple transcript variants encoding different isoforms have been found for this gene. Additional alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Oct 2008]

**Product images:**



Circular map for RC204200



Western blot validation of overexpression lysate (Cat# [LY427559]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC225773] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).