

Product datasheet for **MG221004**

Btc (NM_007568) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Btc (NM_007568) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Btc
Synonyms: Bcn
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG221004 representing NM_007568
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACCAACAGCCCCGGGTAGCAGTGTGAGCTCCCTGCCGCTGCTCCTGGTCTTGCCCTGGGTCTTG
 CAATTCTCCACTGTGTGGTAGCAGATGGGAACACAACCAGAACACCAGAAACCAATGGCTCTCTTTGTGG
 AGCTCCTGGGGAAAAGTGCACAGGTACCACCCCTAGACAGAAAGTAAAACCCACTTCTCTCGTGCCCC
 AAGCAGTACAAGCATTACTGCATCCATGGGAGATGCCGCTTCGTGGTGGACGAGCAAACCTCCCTCTGCA
 TCTGTGAGAAAGGCTACTTTGGGGCTCGGTGTGAGCGAGTGGACCTGTTTTACCTCCAGCAGGACCGGG
 GCAGATCCTGGTGGTCTGCTTGATAGTGGTTCATGGTGGTTCATCATTTTAGTCATCGGCGTCTGCACC
 TGCTGTATCCTCTTCGAAACATCGTAAAAAAGAAGGAAGAGAAAATGGAGACTTTGGATAAAGATA
 AAACCTCCATAAGTGAAGATATTCAAGAGACCAATATTGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG221004 representing NM_007568
 Red=Cloning site Green=Tags(s)

MDPTAPGSSVSSLPLLLVLALGLAILHCVVADGNTTRTPETNGSLCGAPGENCTGTTTPRQKVKTHFSRCP
 KQYKHYCIHGRCRFVVDQTPSCICEKGYFGARCERVDLFFYLQQDRGQILVVCLIVMMVVFIIILVIGVCT
 CCHPLRKHRRKKKKEEMETLDDKTPISEDIIQETNIA

TRTRPLE - GFP Tag - V

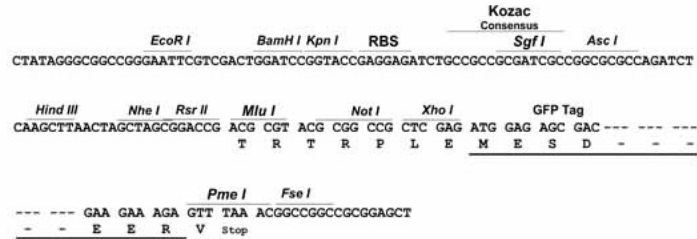
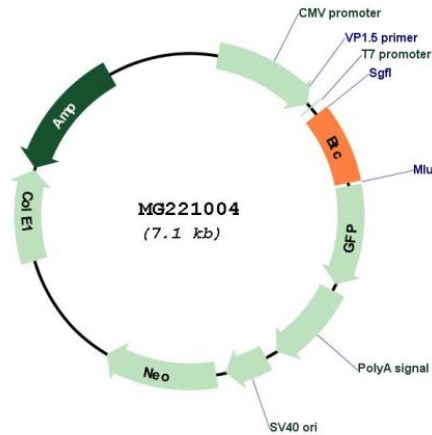
Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Cloning sites used for ORF Shutting:


Plasmid Map:

ACCN: NM_007568

ORF Size: 531 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:	<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:	<u>NM_007568.5, NP_031594.1</u>
RefSeq Size:	2876 bp
RefSeq ORF:	534 bp
Locus ID:	12223
UniProt ID:	<u>Q05928</u>
Cytogenetics:	5 44.78 cM
Gene Summary:	This gene encodes a member of the epidermal growth factor (EGF) family. These growth factors are ligands for the EGFR/ErbB receptor tyrosine kinases, and play roles in cell growth and differentiation. The encoded protein is synthesized as a transmembrane precursor that is proteolytically cleaved to generate a mature peptide, and plays a role in the differentiation of pancreatic beta cells. This gene may also play a protective role in acute pancreatitis, whereas increased expression of this gene may contribute to diabetic macular edema. Gene therapy using combinations of this gene and other pancreas-specific transcription factors may induce islet neogenesis and remediate hyperglycemia in type 1 diabetes. [provided by RefSeq, Apr 2011]