

Product datasheet for **RR205199**

Bace2 (NM_001002802) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bace2 (NM_001002802) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bace2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR205199 representing NM_001002802
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGCGCGCTGCTTCGAGCACTCTTGCTCCCACTGCTGGCGCAGTGGCTCTTGC GCGCGGTCCCGTGC
 TGGCCCCGGCGCCTTACGCTTCCCCTCCAAGTGGCCGGGGCCGGAACACAGAGCCTCAACTGTTCC
 CGGGCTCGGGACCCCGAGTTGCCCGGGCTGATGGCCTGGCCCTCGCACTGGAGCCTGCCAGGGTACC
 GCCAACTTCTTGCTATGGTGGACAATCTTCAGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGA
 TTGGGACCCCTCCGAAAAGGTACGGATTCTTGTGGACACCGGAAGCAGTAACTTCGAGTGGCAGGTGC
 CCCCACTCTACATAGACACCTACTTTGACTCAGAGAGCTCCAGCACATACCACTCCAAGGGCTTTGAG
 GTCACGGTGAAGTACACACAGGAAGCTGGACTGGATTTGTTGGTGGAGACCTTGCACCATCCAAAAG
 GCTTCAACAGCTCTTTCTTGGTCAATATTGCCACTATTTTCGAGTCTGAGAATTTCTTTTGGCTGGGAT
 TAAGTGAATGGAATCCTTGGACTCGCTTATGCTGCCTTGGCCAAGCCATCAAGCTCTCTGGAGACTTTT
 TTTGATTCCTTGGTGGCCCAAGCAAAAATTCGGACATTTTCTCCATGCAGATGTGCGGGGCTGGATTGC
 CAGTAGCTGGATCTGGTACCAACGGAGGTAGTCTTGTCTGGGTGGGATTGAACCAAGTTTGATAAAGG
 AGATATATGGTATACCCCAATTAAGAGGAATGGTACTATCAAATAGAGATCTTGAATTTGAAATTTGGA
 GGCCAGAGCCTCAACCTGGACTGCAGAGAGTATAACGCAGACAAGGCCATTGTGGACAGCGGCACACAC
 TCCTGCGCCTGCCCGAGAAGGTGTTTGTGTCAGTGGTGGAAAGCCGTGGCAGCACATCTCTGATTCCAGA
 GTTTTCTGATGGCTTCTGGACGGGGGCCAGCTGGCATGCTGGACAAATCTGAAACTCCATGGGCGTAT
 TTCCCTAAGATTTCTATCTACCTGAGAGATGAGAACGCCAGTCTGCTCCTCCGAATCACCATTCTGCCGC
 AGCTCTACATTCAGCCCATGATGGGAGCTGGTTTCAATTATGAGTGTACCGTTTTGGTATCTCTCTTTC
 CACAAATGCGCTGGTGATTGGTGCACCGTGATGGAGGATTCTACGTGGTCTTTGACAGAGCTCAGAGG
 AGGGTGGCTTTGCAGTGTGTCCTGTGCAGAGATTGCAGGTACACAGTGTCTGAAATTTCTGGGCCCT
 TTTCCACGGAAGACATAGCCAGCAACTGTGTTCCAGCACAGGCTCTGAATGAGCCCATCTTGTGGATTGT
 GTCCTATGCCCTGATGAGTGTGTGTGGAGCCATTCTCTGGTTCTGATCCTCCTGCTGCTTCCCGCTG
 CACTGCCGACACGCCCCCGAGACCCTGAGGTGGTTAACGATGAATCCTCACTAGTCAGACATCGCTGGA
 AA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR205199 representing NM_001002802
 Red=Cloning site Green=Tags(s)

MGALLRALLLPLLAQWLLRAVPVLAPPFTLPLQVAGAANHRASVPLGTPPELPRADGLALALEPARAT
 ANFLAMVDNLQGDSDGRGYLEMLIGTPPKVIRILVDTGSSNFVAVAGAPHSYIDTYFDESSESSTYHSGKFE
 VTKYQTQGSWTGFVGEDLVTIPKGFNSFLVNIATIFESENFFLPGIKWNGILGLAYAALAKPSSSLETF
 FDSLVAQAKIPDIFSMQMGAGLPVAGSGTNGGSLVLGGIEPSLYKGDIIWYTPIKEEWYQIEILKLEIG
 GQSLNLDREYNADKAI VDSGTTLLRPLQKVFDAVVEAVARTSLIPEFSDGFWTGAQLACWTNSETPWAY
 FPKISIIYLRDENASRSFRITILPQLYIQPMMGAGFNYECYRFGISSSTNALVIGATVMEGFYVVFDRQR
 RVGFAVSPCAEIIAGTTVSEISGPFSTEDIASNCVPAQALNEPILWIVSYALMSVCGAILLVLILLLLFPL
 HCRHAPRDPDEVNDESSLVRHRWK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

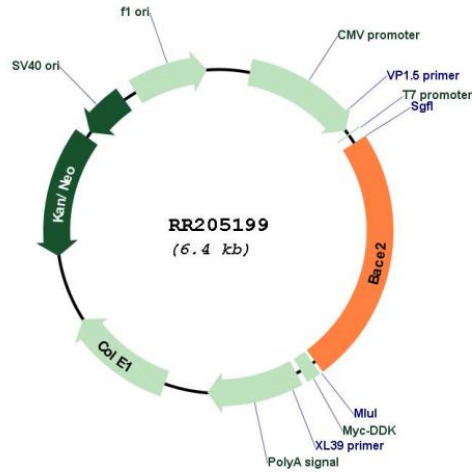
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001002802

ORF Size: 1542 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_001002802.1, NP_001002802.1</u>
RefSeq Size:	1545 bp
RefSeq ORF:	1545 bp
Locus ID:	288227
UniProt ID:	<u>Q6IE75</u>
Cytogenetics:	11q12
MW:	55.9 kDa
Gene Summary:	Responsible for the proteolytic processing of the amyloid precursor protein (APP). Cleaves APP, between residues 690 and 691, leading to the generation and extracellular release of beta-cleaved soluble APP, and a corresponding cell-associated C-terminal fragment which is later released by gamma-secretase. It has also been shown that it can cleave APP between residues 671 and 672 (By similarity). Responsible also for the proteolytic processing of CLTRN in pancreatic beta cells (By similarity).[UniProtKB/Swiss-Prot Function]