

Product datasheet for **RC209115**

BACE1 (NM_012104) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BACE1 (NM_012104) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BACE1
Synonyms:	ASP2; BACE; HSPC104
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC209115 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCAAAGCCCTGCCCTGGCTCTGCTGTGGATGGGCGGGGAGTGCCTGCCACGGCACCCAGC
 ACGGCATCCGGCTGCCCTGCGCAGCGGCTGGGGGGCGCCCCCTGGGGCTGCGGCTGCCCGGGAGAC
 CGACGAAGAGCCCGAGGAGCCCGGCCGGAGGGGACGTTTGTGGAGATGGTGGACAACTGAGGGGCAAG
 TCGGGGACGGCTACTACGTGGAGATGACCGTGGGAGCCCGCCGAGACGCTCAACATCCTGGTGGATA
 CAGGCAGCAGTAACTTTCAGTGGGTGCTGCCCCACCCTTCTGCATCGCTACTACCAGAGGCAGCT
 GTCCAGCACATACCGGGACCTCCGGAAGGGTGTGTATGTGCCCTACACCCAGGGCAAGTGGGAAGGGGAG
 CTGGGCACCGACCTGGTAAGCATCCCCATGGCCCAACGTCAGTGTGCGTGCCAACTTGTGCCATCA
 CTGAATCAGACAAGTTCTTCATCAACGGCTCCAACCTGGGAAGGCATCCTGGGGCTGGCCTATGCTGAGAT
 TGCCAGGCTGACGACTCCCTGGAGCCTTCTTTGACTCTCTGGTAAAGCAGACCCACGTTCCCAACCTC
 TTCTCCCTGCAGCTTTGTGGTGTGGCTTCCCCCTCAACCAAGTCTGAAGTGTGGCTCTGTCCGAGGGGA
 GCATGATCATTGGAGGTATCGACCACTCGCTGTACACAGGCAGTCTCTGGTATACACCCATCCGGCGGGA
 GTGGTATTATGAGGTGATCATTGTGCGGGTGGAGATCAATGGACAGGATCTGAAAATGGACTGCAAGGAG
 TACAACATGACAAGAGCATTGTGGACAGTGGCACCACCAACCTTCGTTTGCCCAAGAAAGTGTGTTGAAG
 CTGCAGTCAAATCCATCAAGGCAGCCTCCTCCACGGAGAAGTTCCTGATGGTTTCTGGCTAGGAGAGCA
 GCTGGTGTGCTGGCAAGCAGGCACCACCCTTGGAAACATTTCCAGTCATCTACTCTACCTAATGGGT
 GAGGTTACCAACAGTCTTCCGCATCACCATCCTCCGCAGCAATACCTGCGGCCAGTGGAAAGATGTGG
 CCACGTCCTCAAGACGACTGTTACAAGTTGCCATCTCACAGTCATCCACGGGCACTGTTATGGGAGCTGT
 TATCATGGAGGGCTTCTACGTTGTCTTTGATCGGGCCGAAAACGAATTGGCTTTGCTGTACGCGCTTGC
 CATGTGCACGATGAGTTCAGGACGGCAGCGGTGGAAAGGCCCTTTTGTACCTTGGACATGGAAGACTGTG
 GCTACAACATTCCACAGACAGATGAGTCAACCCTCATGACCATAGCCTATGTCATGGCTGCCATCTGCGC
 CCTCTTATGCTGCCACTCTGCCTCATGGTGTGTGAGTGGCGCTGCCTCCGCTGCCTGCGCCAGCAGCAT
 GATGACTTTGCTGATGACATCTCCCTGCTGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209115 protein sequence
 Red=Cloning site Green=Tags(s)

MAQALPWL LLMGAGVLP AHGTQH GIRLPLR SGLGGAPLGLRLPRETDEEPEEPGRRGSFVEMVDNLRGK
 SGQGYVEMTVGSPPTLNILVDTGSSNF AVGAAPHPFLHRYRQLSSTYRDLRKG VYVYPYTQGWEGE
 LGTDLVSI PHGPNVTVRANIAA ITESDKFF INGSNWEGILGLAYAEIARPDDSLEPF FDSL VKQTHV PNL
 FSLQLCGAGFPLNQSEVLASVGGSMI IGGIDHSLYTGSLWYTP IRREWYEV IIVRVEINGQDLKMDCKE
 YNYDKSIVDSGTTNLR LPKVFEAAVKS IKAASSTEFDPDFWLGEQLVCWQAGTTPWNI FVISLYLMG
 EVTNQSF RITILPQYLRPVEDVATSQDDCYKFAISQSSTGTVMGAVIMEGFYVVFDRARKRIGFAVSAC
 HVHDEFRTAAVEGPFVTLDMEDCGYNIPQTDESTLMTIAYVMAAICALFMLPLCLMVCQWRCLRCLRQQH
 DDFADDISLLK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6149_a10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_012104

ORF Size: 1503 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_012104.4](#)

RefSeq Size: 5864 bp

RefSeq ORF: 1506 bp

Locus ID: 23621

UniProt ID: [P56817](#)

Cytogenetics: 11q23.3

Domains: asp

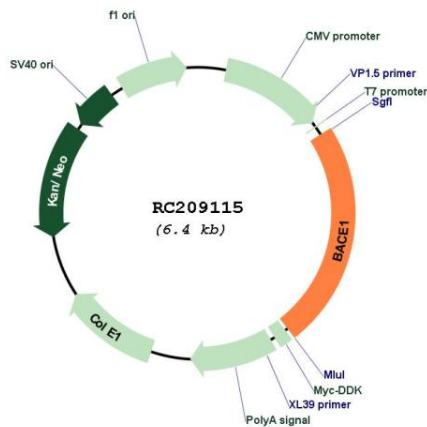
Protein Families: Druggable Genome, Protease, Transmembrane

Protein Pathways: Alzheimer's disease

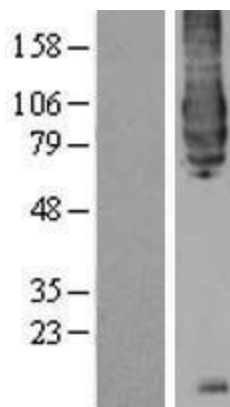
MW: 55.8 kDa

Gene Summary: This gene encodes a member of the peptidase A1 family of aspartic proteases. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature protease. This transmembrane protease catalyzes the first step in the formation of amyloid beta peptide from amyloid precursor protein. Amyloid beta peptides are the main constituent of amyloid beta plaques, which accumulate in the brains of human Alzheimer's disease patients. [provided by RefSeq, Nov 2015]

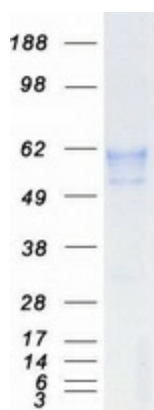
Product images:



Circular map for RC209115



Western blot validation of overexpression lysate (Cat# [LY402147]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209115 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BACE1 protein (Cat# [TP309115]). The protein was produced from HEK293T cells transfected with BACE1 cDNA clone (Cat# RC209115) using MegaTran 2.0 (Cat# [TT210002]).