

Product datasheet for **RC220224**

BACE1 (NM_138971) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | BACE1 (NM_138971) 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:

>RC220224 representing NM_138971
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAAAGCCCTGCCCTGGCTCCTGCTGTGGATGGGCGGGGAGTGCCTGCCACGGCACCCAGC
 ACGGCATCCGGCTGCCCTGCGCAGCGGCTGGGGGGCGCCCCCTGGGGCTGCGGCTGCCCGGGAGAC
 CGACGAAGAGCCCGAGGAGCCCGGCCGGAGGGGACGTTTGTGGAGATGGTGGACAACCTGAGGGGCAAG
 TCGGGGACAGGCTACTACGTGGAGATGACCGTGGGCGAGCCCCCGCAGACGCTCAACATCCTGGTGGATA
 CAGGCAGCAGTAACTTTGCAGTGGGTGCTGCCCCACCCCTTCTGCATCGCTACTACCAGAGGCAGCT
 GTCCAGCACATACCGGGACCTCCGGAAGGGTGTGTATGTGCCCTACACCCAGGGCAAGTGGGAAGGGGAG
 CTGGGCACCGACCTGCCTGACGACTCCCTGGAGCCTTTCTTTGACTCTCTGGTAAAGCAGACCCACGTTCC
 CCAACCTTTCTCCCTGCAGCTTTGTGGTGTGGCTTCCCCTCAACCAGTCTGAAGTGTGGCCTCTGT
 CGGAGGGAGCATGATCATTGGAGGTATCGACCACTCGCTGTACACAGGCAGTCTCTGGTATACCCATC
 CGGCGGGAGTGGTATTATGAGGTGATCATTGTGCGGGTGGAGATCAATGGACAGGATCTGAAAATGGACT
 GCAAGGAGTACAACATGACAAGAGCATTGTGGACAGTGGCACCAACCAACCTTCGTTTGGCCAAAGAAAGT
 GTTTGAAGCTGCAGTCAAATCCATCAAGGCAGCCTCCTCCACGGAGAAGTTCCCTGATGGTTTCTGGCTA
 GGAGAGCAGCTGGTGTGCTGGCAAGCAGGCACCAACCCCTTGGAAACATTTTCCAGTCATCTCACTTACC
 TAATGGGTGAGGTTACCAACAGTCCTTCCGCATCACCATCCTTCCGAGCAATACCTGCGGCCAGTGGA
 AGATGTGGCCACGTCCCAAGCAGACTGTTACAAGTTTCCATCTCACAGTCATCCACGGGCACTGTTATG
 GGAGCTGTTATCATGGAGGGCTTCTACGTTGTCTTTGATCGGGCCGAAAACGAATTGGCTTTGCTGTCA
 GCGCTTGCATGTGCACGATGAGTTCAGGACGGCAGCGGTGGAAGGCCCTTTTGTACCTTGGACATGGA
 AGACTGTGGCTACAACATTCCACAGACAGATGAGTCAACCCTCATGACCATAGCCTATGTCATGGCTGCC
 ATCTGCGCCCTTTCATGCTGCCACTCTGCCTCATGGTGTGTGAGTGGCGCTGCCTCCGCTGCCTGCGCC
 AGCAGCATGATGACTTTGCTGATGACATCTCCCTGCTGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220224 representing NM_138971
 Red=Cloning site Green=Tags(s)

MAQALPWLLLWMGAGVLPAGHTQHGIPLRSLGGAPLGLRPLRETDEEPEEPGRGFSFVEMVDNLRGK
 SGQGYVEMTVGSPPQTLNILDVDTGSSNFVGAAPHPLHRYYQRQLSSTYRDLRKGVYVPTQGWEGE
 LGTDLDDSLPEFFDSL VKQTHVPLNLSLQLCGAGFLNQSEVLASVGGSMIIGGIDHSLYTGSLWYTP
 RREWYVEVIVRVEINGQDLKMDCKEYNYDKSIVDSGTTNLRPLPKVFEAAVKSIIKAASSTEFKPDGF
 GEQLVCWQAGTTPWNIFFVIVSLYLMGEVTNQSFRITILPQYLRPVEDVATSQDDCYKFAISQSSTGTV
 GAVIMEGFYVVFDRARKRIGFAVSACHVHDEFRTAAVEGPFVTLDMEDCGYNIPQTDESTLMTIAYVMAA
 ICALFMLPLCLMVCQWRCLRCLRQHQHDFADDISLLK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8061_c05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_138971

ORF Size: 1371 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_138971.3](#), [NP_620427.1](#)

RefSeq Size: 5718 bp

RefSeq ORF: 1374 bp

Locus ID: 23621

UniProt ID: [P56817](#)

Cytogenetics: 11q23.3

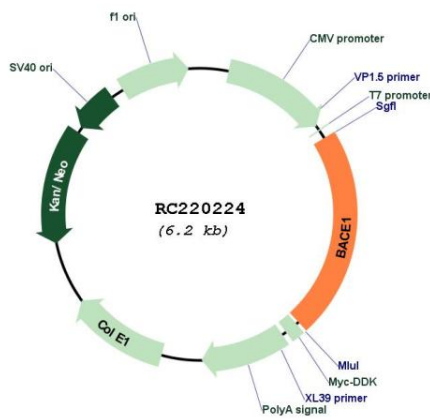
Protein Families: Druggable Genome, Protease, Transmembrane

Protein Pathways: Alzheimer's disease

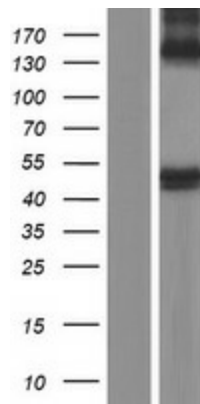
MW: 46.3 kDa

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 RC220224



Western blot validation of overexpression lysate (Cat# [LY408446]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220224 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).