

Product datasheet for **SC115547**

BACE1 (NM_012104) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BACE1 (NM_012104) Human Untagged Clone
Tag:	Tag Free
Symbol:	BACE1
Synonyms:	ASP2; BACE; HSPC104
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC115547 sequence for NM_012104 edited (data generated by NextGen Sequencing)

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ATGGCCCAAGCCCTGCCCTGGCTCCTGCTGTGGATGGGCGCGGGAGTGCCTGCCAC
GGCACCACAGCACGGCATCCGGCTGCCCTGCGCAGCGGCTGGGGGGCGCCCCCTGGGG
CTGCGGCTGCCCCGGGAGACCGACAAGAGCCCGAGGAGCCCGGGCAGGGGACGCTTT
GTGGAGATGGTGGACAACCTGAGGGGCAAGTCGGGGCAGGGCTACTACGTGGAGATGACC
GTGGGCAGCCCCCGCAGACGCTCAACATCCTGGTGGATACAGGCAGCAGTAACCTTGGCA
GTGGGTGCTGCCCCACCCCTTCTGCATCGCTACTACCAGAGGCAGCTGTCCAGCACA
TACCGGGACCTCCGGAAGGGTGTGTATGTGCCCTACACCCAGGGCAAGTGGGAAGGGGAG
CTGGGCACCGACCTGGTAAGCATCCCCATGGCCCAACGTCCTGTGCGTGCCAACATT
GCTGCCATCACTGAATCAGACARGTTTTCATCAACGGCTCCAACCTGGGAAGGCATCCTG
GGGCTGGCCTATGCTGAGATTGCCAGGCTGACGACTCCCTGGAGCCTTTCTTTGACTCT
CTGGTAAAGCAGACCCACGTTCCCAACCTCTTCTCCCTGCAGCTTTGTGGTGCTGGCTTC
CCCCTCAACCAGTCTGAAGTGTGGCCTCTGTGCGAGGGAGCATGATCATTGGAGGTATC
GACCACTCGCTGTACACAGGCAGTCTCTGGTATACACCCATCCGCGGGGAGTGGTATTAT
GAGGTGATCATTGTGCGGGTGGAGATCAATGGACAGGATCTGAAAATGGACTGCAAGGAG
TACAACATGACAAGAGCATTGTGGACAGTGGCACCCACCAACCTTCGTTTGCCCAAGAAA
GTGTTTGAAGCTGCAGTCAAATCCATCAAGGCAGCCTCCTCCACGGAGAAGTTCCCTGAT
GGTTTCTGGCTAGGAGAGCAGCTGGTGTGCTGGCAAGCAGGCACCCACCCCTTGGAAACATT
TTCCAGTCATCTCACTTACCTAATGGGTGAGGTTACCAACAGTCCTTCCGCATCACC
ATCCTTCCGCAGCAATACCTGCGGCCAGTGAAGATGTGGCCACGTCCCAAGACGACTGT
TACAAGTTTGGCATCTCACAGTCATCCACGGGCACTGTTATGGGAGCTGTTATCATGGAG
GGCTTCTACGTTGTCTTTGATCGGGCCCGAAAACGAATTGGCTTTGCTGTCAGCGCTTGC
CATGTGCACGATGAGTTTACGACGGCAGCGGTGGAAGGCCCTTTTGTACCTTGGACATG
GAAGACTGTGGTACAACATTCCACAGACAGATGAGTCAACCCTCATGACCATAGCCTAT
GTCATGGCTGCCATCTGCGCCCTTTCATGCTGCCACTCTGCCTCATGGTGTGTCAGTGG
CGCTGCCTCCGCTGCCTGCGCCAGCAGCATGATGACTTTGCTGATGACATCTCCCTGCTG
AAGTGA
    
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Clone variation with respect to NM_012104.4
503 a=>r

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_012104 unedited
GAATACGACTCACTATAGGGCGGGCCGGAATTCGGCAGCAGGACCACCCAGACTTGGGGG
CAGGGCCAGGGACGGACGTGGGCCAGTGCAGCCAGAGGGCCGAAGGCCGGGGCCCA
CCATGGCCCAAGCCCTGCCCTGGCTCCTGCTGTGGATGGGCGCGGGAGTGTGCTGCC
ACGGCACCCAGCACGGCATCCGGCTGCCCTGCGCAGCGGCTGGGGGGCGCCCCCTGG
GGCTGCGGCTGCCCGGGAGACCGACGAAGAGCCGAGGAGCCCGCGGGAGGGGAGCT
TTGTGGAGATGGTGGACAACCTGAGGGGCAAGTCGGGGCAGGGCTACTACGTGGAGATGA
CCGTGGGAGAGCCCCCGCAGACGCTCAACATCCTGGTGGATACAGGCAGCAGTAACCTTG
CAGTGGGTGCTGCCCCCACCCTTCTGCATCGCTACTACCAGAGGCAGCTGTCCAGCA
CATACCGGACCTCCGGAAGGGTGTGTATGTGCCCTACACCCAGGGCAAGTGGGAAGGGG
AGCTGGGACCGACCTGGTAAGCATCCCCATGGCCCAACGTCCTGTGCGTGCCAACA
TTGCTGCCATCACTGAATCAGACAAGTTTTCATCAACGGCTCCAACCTGGGAAGGCATCC
TGGGGCTGGCCTATGCTGAGATTGCCAGGCTGACGACTCCCTGGAGCCTTTCTTTGACT
CTCTGGTAAAGCAGACCCACGTTCCCAACCTTCTCCCTGCAGCTTTGTGGGTGCTGG
CCTTCCCTCCACCAGTCTGAAGTGTGCTCCTGTGCGGAGGGAGCATGATCATTGGAGG
TATCGACCACTCCCTGTACACAAGCAGTCTCTGGTATACACCCATCCGCGGGAGTGTATT
ATGAAGGGATCATTGGCGGTGGAACATCATGGACACGACTG
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_012104 unedited CTTACTTGNNACCGCGGCCGCTATCTANGATCGAGTTTTTTTTTTTTTTTTTTTTAAAACT GACTCAGTATTCTTGTATTATTGGTTTATGGCTTGTGGGCAGCTGGCTGAGGCCAGGAAC ACCAGAGGCCCTCCTTGTATTTCCCTCTCCCTTATCAGGTAATCCACACTTAGCAGGTC CCATACCTGGAAGCAGCGGGTTGACCAGGTAGGAGTAGGATGCAGTGGGTATACTAGGAA AACCCAGCTCTTCCCACTAACACTGGTACCGTAGTTTACTATGCTAGAACTGATAGGGAG GTAATGAACTTGGTCCCCACTACCTAGCCCAAGAACCAGCCTGGGTACCCACGTACCATT AGGAGCGGGGAGGGGAAGAACAGGATAGGGGAAAAGATGACCTTCATCAAGGAGCTCTT GTGGTGGAGGACATAAGGAAGCCCTGAGGCTGCCATCCTTTCTCCAGGCAGCCTTGATA TGAAGGCAGTAATGTTAGAGCCATAAAGCACTGTATTTCTCATACTCTTGGTATAATGCT AGTGCCACTGTGTGATGCTTTAGTCAAATAAATGGAGGGGCCATTANAGAGGGTAGGAAG GCAATGAAACCACTCTGAATTATGTAAGATCTTGCTACTTCTTATAGCCTAATAGGAAG AAATCCAGGCAGGGTTATAGGCATCAGCTGTTGAATGAATGTTCAACATTATGCTNNT AAGGATTAGATAGAAGAAGTCTNCTACCTATTCCTTTTAGCACCTGGNCTGCAAAGCTCC AGAGGAAGAAATTGGGGAAAGAGTGAGCCTATGACCCAGAAGACAGAGCCAGCCCTGCT ATAGTCCAGTTGCTCTCCACAGGCACCTGGAGCTTAGGGGNNTAGAATTCAGTGCTG CCTTCATATGTAGATAAAGGGTGGTCAGAAGAGACATGAAATTATATGCNGAAATT
Restriction Sites:	NotI-NotI
ACCN:	NM_012104
Insert Size:	3270 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	NM_012104.3 , NP_036236.1
RefSeq Size:	5850 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

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]
Transcript Variant: This variant (a) is the longest transcript and it encodes the longest isoform (A).