

Product datasheet for **SC127678**

BACE2 (NM_138992) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BACE2 (NM_138992) Human Untagged Clone
Tag:	Tag Free
Symbol:	BACE2
Synonyms:	AEPLC; ALP56; ASP1; ASP21; BAE2; CDA13; CEAP1; DRAP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC127678 sequence for NM_138992 edited (data generated by NextGen Sequencing)

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ATGGGCGCACTGGCCCCGGCGCTGCTGCTGCCTCTGCTGGCCAGTGCTCCTGCGCGCC
GCCCCGGAGCTGGCCCCGCGCCCTTACGCTGCCCTCCGGGTGGCCGCGGCCACGAAC
CGCGTAGTTGCGCCACCCCGGACCCGGACCCCTGCCGAGCGCCACGCCGACGGCTTG
GCGCTCGCCCTGGAGCCTGCCCTGGCGTCCCCCGGGCGCCGCAACTTCTTGCCATG
GTAGACAACTGCAGGGGACTCTGGCCGCGGCTACTACCTGGAGATGCTGATCGGGACC
CCCCCGCAGAAGCTACAGATTCTCGTTGACTGGAAGCAGTAACCTTGCCGTGGCAGGA
ACCCCGCACTCTACATAGACACGTAACCTTACACAGAGAGGTCTAGCACATACCGCTCC
AAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGGGCTTCGTTGGGAA
GACCTCGTCACCATCCCCAAAGGCTTCAATACTTCTTTTCTTGCAACATTGCCACTATT
TTTGAATCAGAGAATTTCTTTTGCCTGGGATTAATGGAATGGAATACTTGGCCTAGCT
TATGCCCACTTGCCAAGCCATCAAGTTCTCTGGAGACCTTCTTCGACTCCCTGGTGACA
CAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCGGCTTGCCCGTTGCT
GGATCTGGGACCAACGGAGGTAGTCTTGTCTTGGGTGGAATTGAACCAAGTTTGTATAAA
GGAGACATCTGGTATACCCCTATTAAGGAAGAGTGGTACTACCAGATAGAAATCTGAAA
TTGGAAATTGGAGGCCAAAGCCTTAATCTGGACTGCAGAGAGTATAACGCAGACAAGGCC
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GAAGCTGTGGCCCGGCATCTCTGATTCCAGAATCTCTGATGGTTCTGGACTGGGTCC
CAGCTGGCGTGCTGGACGAATTCGAAACACCTTGGTCTTACTTCCCTAAAATCTCCATC
TACCTGAGAGAYGAGAACTCCAGCAGGTATTCCGTATCACAATCCTGCCTCAGAAATTG
CAGGTGCTGCAGTGTCTGAAATTTCCGGGCCTTCTCAACAGAGGATGTAG

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Clone variation with respect to NM_138992.1
1092 c=>y



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_138992 unedited GTAACACGACTTACTATAGGGCGGCCGCAATTCGCACGAGGGCCCCGCGCGCCGGCCG AGTCGCTGAGCCGCGGCTGCCGGACGGGACGGGACCGGCTAGGCTGGGCGCGCCCCCGG GCCCGCCGTGGGCATGGGCGCACTGGCCCGGGCGCTGCTGCTGCCTCTGCTGGCCCACT GGCTCTGCGCGCCGCCCGGAGCTGGCCCCCGCGCCCTTACGCTGCCCTCCGGGTGG CCGCGGCCACGAACCGCGTAGTTGCGCCACCCCGGGACCCGGGACCCCTGCCGAGCGCC ACGCCGACGGCTTGGCGCTCGCCCTGGAGCTGCCCTGGCGTCCCCCGGGCGCCGCCA ACTTCTTGCCATGGTAGACAACCTGCAGGGGGACTCTGGCCGCGCTACTACCTGGAGA TGCTGATCGGGACCCCCCGCAGAAGCTACAGATTCTCGTTGACACTGGAAGCAGTAACT TTGCCGTGGCAGGAACCCCGCACTCCTACATAGACACGTAATTTGACACAGAGAGGTCTA GCACATACCGCTCCAAGGGCTTTGACGTCACAGTGAAGTACACACAAGGAAGCTGGACGG GCTTCGTTGGGAAGACCTCGTACCATCCCCAAAGGCTTCAATACTTCTTTTCTGTCA ACATTGCCACTATTTTTGAATCAGAGAATTTCTTNTGCCTGGGATTAATGGAATGGAA TACTTGGCTAGCTTATGCCACACTTGCCAAGCCATCANAGTCTCTGGAGACCTTCTTCG ACTCCCTGGTGACACAAGCAAACATCCCCAACGTTTTCTCCATGCAGATGTGTGGAGCCC GCTTGCCCGTTGCTGGATCTGGGACCCACGGNAGTAGTCTGTCTTGNTGGAANTGAACA AGTTGTATAAAGAGACATCTGTATACCCT</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_138992 unedited GGCCGCATTTTAGAGTCGAGTTTTTTTTTTTTTTTTTTTCTTGGAAAGTAGGGAGGATTTGA AAGCTTAAAAATCAAGAATCAAAAGACAGTGAATCTAGAAGGCATCTGGGAGCAGAACAG AGATTGAAGACGGGTGGGCACAGGAGAAAGCGCCACCATCGATCCCGGCTGCTGCCCTGG AAATGTGATTTTCTTAATAGCTGAGTTCATGGTTGCTTGAGGTCAGGCCTGGCTATTCAT TTCCAGCGATGTCTGACCAGAGAGGACTCATCATTGACGACCTCAGGGTCACGGGGCGCA CGCTGACACCCGGAACGGCAGCAGCAGCAGGACGATTAAGACAAGGAGGATGGCTCCACAG ACGCTCATGAGCGCATAGGACACAATCCACAAAATGGGCTCGCTCAAAGACTGAGCGGGG ACACAGTTGCTGGCTACATCCTCTGTTGAGAAAGGCCCGAAATTTAGACACTGCAGCA CCTGCAATTTCTGCACAGGGGCTCGCTGCGAAGCCACCCTCTTCTGGGCTCTGTGGAAG ATGACGTAGAAGCCCTCCATCACCGTGGCACCATCACCAGCGCATTTGTGGATGGGGAA ATGCCGAATCGGTAACATTATAATTAGGCGCGCCCATCATGGGCTGAATGTAAGC TGAGCAGGATTGTGATACGGAATGACCTGCTGGAGTTCTGCTCTCAGGTAGATGGAG ATTCTAGGGAAGTAAGACCAAGGTGTTCCGAATTCGTCCAGCAGCCAGCTGGGACCCAG TCCAGAAACCATCAGNAGAATTCTGGGAATCAGAGATGCGCGGNCCACAGCTTTACCA CCGCATCAAACACCTTCTGGGGCGCAGCCGCACAACGTGGTGGCACTGTCCACNATGCC TGCTTGCNATACTTTTGCAGCCAGATTAAGCTTTGGCCTCCATTCCAATTTAGATTC TTATTGTAGACN</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_138992
Insert Size:	1920 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:

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_138992.1](#), [NP_620477.1](#)

RefSeq Size: 2824 bp

RefSeq ORF: 1191 bp

Locus ID: 25825

UniProt ID: [Q9Y5Z0](#)

Cytogenetics: 21q22.2-q22.3

Domains: asp

Protein Families: Druggable Genome, Protease, Transmembrane

Protein Pathways: Alzheimer's disease

Gene Summary: This gene encodes an integral membrane glycoprotein that functions as an aspartic protease. The encoded protein cleaves amyloid precursor protein into amyloid beta peptide, which is a critical step in the etiology of Alzheimer's disease and Down syndrome. The protein precursor is further processed into an active mature peptide. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]
Transcript Variant: This variant (b) lacks an exon in the 3' coding region, which results in a frameshift, compared to variant a. The encoded isoform (B) is shorter and has a distinct C-terminus, compared to isoform A. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.