

Product datasheet for **SC115331**

Butyrylcholinesterase (BCHE) (NM_000055) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Butyrylcholinesterase (BCHE) (NM_000055) Human Untagged Clone
Tag:	Tag Free
Symbol:	Butyrylcholinesterase
Synonyms:	BCHE1; CHE1; CHE2; E1
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 SC115331 sequence for NM_000055 edited (data generated by NextGen Sequencing)

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ATGCATAGCAAAGTCACAATCATATGCATCAGATTTCTCTTTGGTTTCTTTTGCTCTGC
ATGCTTATTGGGAAGTCACATACTGAAGATGACATCATAATTGCAACAAAGAATGGAAAA
GTCAGAGGGATGAACTTGACAGTTTTGGTGGCACGGTAACAGCCTTTCTTGAATTCCC
TATGCACAGCCACCTCTTGGTAGACTTCGATTCAAAAAGCCACAGTCTCTGACCAAGTGG
TCTGATATTTGGAATGCCACAAAATATGCAAATCTTGCTGTGAGAACATAGATCAAAGT
TTCCAGGCTTCCATGGATCAGAGATGTGGAACCCAAACACTGACCTCAGTGAAGACTGT
TTATATCTAAATGTATGGATTCCAGCACCTAAACCAAAAAATGCCACTGTATTGATATGG
ATTTATGGTGGTGGTTTTCAAACCTGGAACATCATCTTTACATGTTTATGATGGCAAGTTT
CTGGCTCGGGTTGAAAGAGTTATTGTAGTGTCAATGAACTATAGGGTGGGTGCCCTAGGA
TTCTTAGCTTTGCCAGGAAATCTGAGGCTCCAGGGAACATGGGTTTATTTGATCAACAG
TTGGCTCTTCAGTGGTTCAAAAAATATAGCAGCCTTTGGTGGAAATCCTAAAAGTGA
ACTCTCTTTGGAGAAAGTGCAGGAGCAGCTTCAGTTAGCCTGCATTTGCTTCTCCTGGA
AGCCATTCATTGTTCAACAGAGCATTCTGCAAAGTGGATCCTTTAATGCTCCTTGGGCG
GTAAACATCTTTATGAAGCTAGGAACAGAACGTTGAACCTAGCTAAATTGACTGGTTGC
TCTAGAGAGAATGAGACTGAAATAATCAAGTGTCTTAGAAATAAAGATCCCAAGAAATT
CTTCTGAATGAAGCATTGTTGTCCCCTATGGGACTCCTTTGTCAGTAACTTTGGTCCG
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ACAGGAAATATTGATGAAGCAGAATGGGAGTGGAAAGCAGGATTCATCGCTGGAACAAT
TACATGATGGACTGGAAAATCAATTTAACGATTACACTAGCAAGAAAGAAAGTTGTGTG
GGTCTCTAA

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Clone variation with respect to NM_000055.2

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000055 unedited
TACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGATGATTTTCACTCCTTGCAAA
CTTTGCCATCTTTGTTGCAGAGAATCGGAAATCAATATGCATAGCAAAGTCACAATCATA
TGCATCAGATTTCTTTTGGTTCTTTTGGCTCTGCATGCTTATTGGGAAGTCACATACT
GAAGATGACATCATAATTGCAACAAAGAATGGAAAAGTCAGAGGGATGAACCTGCAGTT
TTTGGTGGCACGGTAACAGCCTTTCTTGAATTCCTATGCACAGCCACCTCTTGGTAGA
CTTCGATTCAAAAAGCCACAGTCTGACCAAGTGGTCTGATATTTGGAATGCCACAAAA
TATGCAAATTCCTGCTGTCAGAACATAGATCAAAGTTTTCCAGGCTTCCATGGATCAGAG
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GGAACATCATCTTTACATGTTTATGATGGCAAGTTTCTGGCTCGGGTTGAAAGAGTTATT
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GAGGCTCCAGGGAACATGGGTTTATTTGATCAACAGTTGGCTCTTCAGTGGGTTCAAAA
AATATAGCAGCCTTTTGTGAAAATCCCTAAAGTNTACTCTCTNTGGAGAAATGCANGAG
CAGCTTCAGTTAGCCTGCATTTGCTTTCTCTGNAAGCATTATTGNTCACCAGANCCAT
CTGCANAGTGGATCCTTTATGCTCCNTTGGCGGTACATCTCTTTATGAAGCTAGACAGAC
GTTGAACTTACTAANTGACTGGTCTCTAAAGATGAGCTGANTAATCAGGGCTAAA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000055 unedited
TTTTAAAANNNTACTGNACGCGCCGATTCTANGATCAGTTTTTTTTTTTTTTTTT
TGATTTCTGTGCTTATTTAATATCTCATATTGACATTCAATTCTTATTTAATTAGGA
AACATAATATTGAACTATGGTGTACAGTGTTCAATATTTAATTCATTTAAAAAGAT
ACCTTTTTACGAGTGGTAATGAAAATACACGTGACTAAAAGCAGAGCACTGATAATTTTG
GGGGAAAAAACTTAAATTTATTAAGGAAAGAAAGAAATTGAACCAAGGCCATTGTTTTA
ATATGCACATAATTAAGTGTAGAACTTTATATTGTGAAATTTAATTAACATGTTCTAGC
CATTTGGGTTTTTGAATGCTANGTAAAATACTAAGNTAAAGATGTGAGGAATCAATATT
ATCCTTCTGGCATTTTTGGTTGACGTACATAATAACTTTTTTTAGTAGGTGTGTAATAAA
GCTCCTGATATTTTTGCCTTGATCTAAAGGAAAAATATGTCTATAAAAAGGTAANTCTAT
TAATTANAGACCCACCACTTTCTTTCTGGCTAGGAAATCCGTAATGATTTTTCCAG
TCCATCATGTAATTGGTCCNAGGATTGAATCCTGCTTTTCACTCCCATTTGGTTTTAATA
AATTTCTGGCATTTCAAAACCTTTGAAAAAATGAAGTCAAAAATCAAATGGTTAGCCC
CGAATTTTCGCATTTTTCTTGGTACCCTTGATTAAGGGTAAAAATTTTTTGTAAAGGC
TTTTAAAAACAGCCACTTGGCCTTTGGTTTGAACCCATTTGGATTCCCATTTTTGCAAA
TTTGCCCCCTTTCCATTGAGATTACCCAAAATCCCCTTTTGGGAAATAACCTTTTT
TCCAGAGGAAACCAAAAATTTTTTTAGCCTGCCTTTTCCCCTCTTTTGGCCGAGA
TTTGGGGACGGGTTAAAAATAAAAAAGTTTTTTTCC

Restriction Sites:

NotI-NotI

ACCN:

NM_000055

Insert Size:

2430 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_000055.1](#), [NP_000046.1](#)

RefSeq Size: 2444 bp

RefSeq ORF: 1809 bp

Locus ID: 590

UniProt ID: [P06276](#)

Cytogenetics: 3q26.1

Domains: COesterase

Protein Families: Druggable Genome, Transmembrane

Gene Summary: This gene encodes a cholinesterase enzyme and member of the type-B carboxylesterase/lipase family of proteins. The encoded enzyme exhibits broad substrate specificity and is involved in the detoxification of poisons including organophosphate nerve agents and pesticides, and the metabolism of drugs including cocaine, heroin and aspirin. Humans homozygous for certain mutations in this gene exhibit prolonged apnea after administration of the muscle relaxant succinylcholine. [provided by RefSeq, Jul 2016]
Transcript Variant: This variant (1) encodes the protein.