

Product datasheet for SC211570

OriGene Technologies, Inc.

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Acetylcholinesterase (ACHE) (NM_015831) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones

Product Name: Acetylcholinesterase (ACHE) (NM_015831) Human 3' UTR Clone

Vector: pMirTarget (PS100062)

Symbol: ACHE

Synonyms: ACEE; ARACHE; N-ACHE; YT

ACCN: NM_015831

Insert Size: 1015 bp

Insert Sequence: >SC211570 3'UTR clone of NM_015831

The sequence shown below is from the reference sequence of NM_015831. The complete

sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG

TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC

CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: Sgfl-Mlul





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OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a

point of reference. Note that the complete sequence of this clone is largely the same as the

reference sequence but may contain minor differences, e.g., single nucleotide

polymorphisms (SNPs).

Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The

package also includes 100 pmols of both the corresponding 5' and 3' vector primers in

separate vials.

RefSeq: <u>NM 015831.2</u>

Summary: Acetylcholinesterase hydrolyzes the neurotransmitter, acetylcholine at neuromuscular

junctions and brain cholinergic synapses, and thus terminates signal transmission. It is also found on the red blood cell membranes, where it constitutes the Yt blood group antigen. Acetylcholinesterase exists in multiple molecular forms which possess similar catalytic properties, but differ in their oligomeric assembly and mode of cell attachment to the cell surface. It is encoded by the single ACHE gene, and the structural diversity in the gene products arises from alternative mRNA splicing, and post-translational associations of catalytic and structural subunits. The major form of acetylcholinesterase found in brain, muscle and other tissues is the hydrophilic species, which forms disulfide-linked oligomers with collagenous, or lipid-containing structural subunits. The other, alternatively spliced form, expressed primarily in the erythroid tissues, differs at the C-terminal end, and contains a cleavable hydrophobic peptide with a GPI-anchor site. It associates with the membranes through the phosphoinositide (PI) moieties added post-translationally. AChE activity may constitute a sensitive biomarker of RBC ageing in vivo, and thus, may be of aid in

understanding the effects of transfusion[provided by RefSeq, Sep 2019]

Locus ID: 43

MW: 37.5