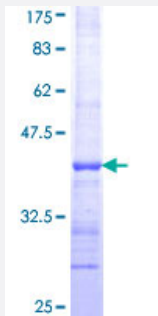


ACHE (Human) Recombinant Protein (Q01)

Catalog # H00000043-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ACHE partial ORF (NP_000656, 515 a.a. - 614 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	ARTGDPNEPRDPKAPQWPPYTAGAQQYVSLDLRPLEVRRGLRAQACAFWNRFLPKLLSATDTL DEAERQWKAEFHRWSSYMVHWKNQFDHYSKQDRCSDL
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
Interspecies Antigen Sequence	Mouse (91)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — ACHE

Entrez GeneID [43](#)

GeneBank Accession# [NM_000665](#)

Protein Accession# [NP_000656](#)

Gene Name ACHE

Gene Alias ARACHE, N-ACHE, YT

Gene Description acetylcholinesterase (Yt blood group)

Omim ID [100740](#) [112100](#)

Gene Ontology [Hyperlink](#)

Gene 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. [provided by RefSeq]

Other Designations acetylcholinesterase|apoptosis-related acetylcholinesterase

Pathway

- [Glycerophospholipid metabolism](#)

Disease

- [Abortion](#)
- [Alzheimer disease](#)
- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Hypercholesterolemia](#)
- [Mental Disorders](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Thyroid Neoplasms](#)
- [Weight Gain](#)