



# Recombinant Human Succinate-semialdehyde dehydrogenase, mitochondrial (ALDH5A1)

<b>Product Code</b>	CSB-EP001577HU-B
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P51649
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	AGRLAGLSAALLRTDSFVGGRWLPAAATFPVQDPASGAALGMVADCGVREA RAAVRAAYEAFRCRWREVS AKERSLLRKWYNLMIQNKDDLARIITAESGKPLK EAHGEILYSAFFLEWFSEEARRVYGDIIHTPAKDRRALVLKQPIGVA AVITPWNF PSAMITRKVGAALAAAGCTVVVKPAEDTPFSALALAE LASQAGIPSGVYNVIPCS RKNAKEVGEAICTDPLVSKISFTGSTTTG KILLHHAANSVKRVSMELGGLAPFIV FDSANVDQAVAGAMASKFRNTGQTCVCSNQFLVQRGIHDAFVKAF AEAMKKN LRVNGFEEGTTQGPLINEKAVEKVEKQVND AVSKGATVVTGGKRHQLGKNF FEPTLLCNVTQDMLCTHEETFGPLAPVIKFDTEEEAIAIANAADVGLAGYFYSQ DPAQIWRVAEQLEVGMVGVNEGLISSVECPFGG VKQSGLGREGSKYGIDEYL ELKYVCYGG L
<b>Research Area</b>	Metabolism
<b>Source</b>	E.coli
<b>Target Names</b>	ALDH5A1
<b>Protein Names</b>	Recommended name: Succinate-semialdehyde dehydrogenase, mitochondrial EC= 1.2.1.24 Alternative name(s): Aldehyde dehydrogenase family 5 member A1 NAD(+)-dependent succinic semialdehyde dehydrogenase
<b>Expression Region</b>	48-535aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4? for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	This protein belongs to the aldehyde dehydrogenase family of proteins. This gene encodes a mitochondrial NAD(+)-dependent succinic semialdehyde dehydrogenase. A deficiency of this enzyme, known as 4-hydroxybutyricaciduria, is a rare inborn error in the metabolism of the neurotransmitter 4-aminobutyric acid (GABA). In response to the defect, physiologic fluids from patients accumulate GHB, a compound with numerous neuromodulatory properties. Two transcript variants encoding distinct isoforms



have been identified for this gene.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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