Recombinant Human Aldehyde dehydrogenase, mitochondrial (ALDH2)

Product Code	CSB-MP001571HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P05091
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	SAA ATQAVPAPNQ QPEVFCNQIF INNEWHDAVS RKTFPTVNPS TGEVICQVAE GDKEDVDKAV KAARAAFQLG SPWRRMDASH RGRLLNRLAD LIERDRTYLA ALETLDNGKP YVISYLVDLD MVLKCLRYYA GWADKYHGKT IPIDGDFFSY TRHEPVGVCG QIIPWNFPLL MQAWKLGPAL ATGNVVVMKV AEQTPLTALY VANLIKEAGF PPGVVNIVPG FGPTAGAAIA SHEDVDKVAF TGSTEIGRVI QVAAGSSNLK RVTLELGGKS PNIIMSDADM DWAVEQAHFA LFFNQGQCCC AGSRTFVQED IYDEFVERSV ARAKSRVVGN PFDSKTEQGP QVDETQFKKI LGYINTGKQE GAKLLCGGGI AADRGYFIQP TVFGDVQDGM TIAKEEIFGP VMQILKFKTI EEVVGRANNS TYGLAAAVFT KDLDKANYLS QALQAGTVWV NCYDVFGAQS PFGGYKMSGS GRELGEYGLQ AYTEVKTVTV KVPQKNS
Source	Mammalian cell
Target Names	ALDH2
Protein Names	Recommended name: Aldehyde dehydrogenase, mitochondrial EC= 1.2.1.3 Alternative name(s): ALDH class 2 ALDH-E2 ALDHI
Expression Region	18-517
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This protein belongs to the aldehyde dehydrogenase family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of this enzyme, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes, while approximately 50% of Orientals have only the cytosolic isozyme, missing the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than among Caucasians could be related to the absence of the mitochondrial isozyme. This gene encodes a mitochondrial isoform, which has a low Km for acetaldehydes, and is localized in mitochondrial matrix.

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.
Shelf Life	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.