



Recombinant Human Retinal dehydrogenase 2 (ALDH1A2)

Product Code	CSB-MP001566HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	O94788
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	MTSSKIEMPGEVKADPAALMASLHLLPSPTPNLEIKYTKIFINNEWQNSESGRV FPVYNP ATGEQVCEVQEADKADIDKAVQAARLAFSLGSVWRRMDASERGRLLDKLADL VERDRAVL ATMESLNGGKPFLQAFYVDLQGVIKTFRYYAGWADKIHGMTIPVDGDYFTFTR HEPIGVC GQIIPWNFPLLMFAWKIAPALCCGNTVVIKPAEQTPLSALYMGALIKEVGKLIQE AAGRS NLKRVTLLELGGKSPNIIFADADLDYAVEQAHQGVFFNQQGCCTAGSRIFVEESI YEEFVR RSVERAKRRVVGSPFDPTEQGPQIDKKQYNKILELIQSGVAEGAKLECGGKG LGRKGFF IEPTVFSNVTDDMRIAKEEIFGPVQEILRFKTMDEVIERANNSDFGLVAAVFTND INKAL TVSSAMQAGTVWINCYNALNAQSPFGGFKMSGNGREMGEFGLREYSEVKTV TVKIPQKNS
Source	Mammalian cell
Target Names	ALDH1A2
Protein Names	Recommended name: Retinal dehydrogenase 2 Short name= RALDH 2 Short name= RalDH2 EC= 1.2.1.36Alternative name(s): Aldehyde dehydrogenase family 1 member A2 Retinaldehyde-specific dehydrogenase type 2 Short name= RA
Expression Region	1-480
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 isoform 2
Target Details	This protein belongs to the aldehyde dehydrogenase family of proteins. The product of this gene is an enzyme that catalyzes the synthesis of retinoic acid (RA) from retinaldehyde. Retinoic acid, the active derivative of vitamin A (retinol), is a hormonal signaling molecule that functions in developing and adult tissues. The studies of a similar mouse gene suggest that this enzyme and the



cytochrome CYP26A1, concurrently establish local embryonic retinoic acid levels which facilitate posterior organ development and prevent spina bifida. Three transcript variants encoding distinct isoforms have been identified for this gene.

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.