



Recombinant Human Isocitrate dehydrogenase [NAD] subunit beta, mitochondrial (IDH3B)

Product Code	CSB-EP010992HU-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	O43837
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	ASRSQA EDVRVEGSFP VTMLPGDGVG PELMHAVKEV FKAAAVPVEF QEHHLSEVQN MASEEKLEQV LSSMKENKVA IIGKIHTPME YKGELASYDM RLRRKLDLFA NVVHVKSLPG YMTRHNNLDL VIIREQTEGE YSSLEHESAR GVIECLKIVT RAKSQRIAKF AFDYATKKGR GKVTAVHKAN IMKLGDGLFL QCCEEVAELY PKIKFETMII DNCCMQLVQN PYQFDVLVMP NLYGNIIDNL AAGLVGGAGV VPGESYSAEY AVFETGARHP FAQAVGRNIA NPTAMLLSAS NMLRHLNLEY HSSMIADAVK KVIKVGKVRT RDMGGYSTTT DFIKSVIGHL QTKGS
Source	E.coli
Target Names	IDH3B
Protein Names	Recommended name: Isocitrate dehydrogenase [NAD] subunit beta, mitochondrial EC= 1.1.1.41 Alternative name(s): Isocitric dehydrogenase subunit beta NAD(+)-specific ICDH subunit beta
Expression Region	35-385
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	Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. NAD(+)-dependent isocitrate dehydrogenases catalyze the allosterically regulated rate-limiting step of the tricarboxylic acid cycle. Each isozyme is a heterotetramer that is composed of two alpha subunits, one beta subunit, and one gamma subunit. This protein is the beta subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. Three alternatively spliced transcript variants encoding different isoforms have been described 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.