



Recombinant Human Isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial (IDH3G)

Product Code	CSB-BP010993HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P51553
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	F SEQTIPPSAK YGGRHTVTMI PGDGIGPELM LHVKSVFRHA CVPVDFEEVH VSSNADEEDI RNAIMAIRRN RVALKGNIEH NHNLPPSHKS RNNILRTSLD LYANVIHCKS LPGVVTRHKD IDILIVRENT EGEYSSLEHE SVAGVVESLK IITKAKSLRI AEYAFKLAQE SGRKKVTAVH KANIMKLG DG LFLQCCREVA ARYPQITFEN MIVDNTTMQL VSRPQQFDVM VMPNLYGNIV NNV CAGLVGG PGLVAGANYG HVYAVFETAT RNTGKSIANK NIANPTATLL ASCMMLDHLK LHSYATSIRK AVLASMDNEN MHTPDIGGGG TTSEAIQDVI RHIRVINGRA VEA
Source	Baculovirus
Target Names	IDH3G
Protein Names	Recommended name: Isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial EC= 1.1.1.41 Alternative name(s): Isocitric dehydrogenase subunit gamma NAD(+)-specific ICDH subunit gamma
Expression Region	40-393
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 gamma subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. This gene is a candidate gene for periventricular heterotopia. Several alternatively spliced transcript variants of this gene have been described, but only some of their full



length natures have been determined.

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.