



# Recombinant Rat Isocitrate dehydrogenase [NADP], mitochondrial (Idh2)

<b>Product Code</b>	CSB-BP010990RA
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P56574
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	A EKRIKVEKPV VEMDGDEMTR IIWQFIKEKL ILPHVDVQLK YFDLGLPNRD QTNDQVTIDS ALATQKYSVA VKCATITPDE ARVEEFKLLK MWKSPNGTIR NILGGTVFRE PIICKNIPRL VPGWTKPITI GRHAHGDQYK ATDFVVDRA G MFKLVFTPKD GSGAKEWEVY NFPAGGVGMG MYNTDEISIG FAHSCFQYSI QKKWPLYLST KNTIMKAYDG RFKDIFQEIF DKHYKTDFDK NKIWEYHRLI DDMVAQVLKS SGGFVWACKN YDGDVQSDIL AQGFGSLGLM TSVLVCPDGK TIEAEEAHGT VTRHYREHQB GRPTSTNPIA SIFAWTRGLE HRGKLDGNQD LIRFAQTLEK VCVQTVESGA MTKDLAGCIH GLSNVKNLNEH FLNTTDFLDT IKSNLDRALG KQ
<b>Source</b>	Baculovirus
<b>Target Names</b>	Idh2
<b>Protein Names</b>	Recommended name: Isocitrate dehydrogenase [NADP], mitochondrial Short name= IDH EC= 1.1.1.42 Alternative name(s): ICD-M IDP NADP(+)-specific ICDH Oxalosuccinate decarboxylase
<b>Expression Region</b>	40-452
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C 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>	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. Each NADP(+)-dependent isozyme is a homodimer. This protein is the NADP(+)-dependent isocitrate dehydrogenase found in the mitochondria. It plays a role in intermediary metabolism and energy production. This protein may tightly associate or interact with the pyruvate dehydrogenase complex.
<b>Reconstitution</b>	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.