



# Recombinant Bovine NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5 (NDUFA5)

<b>Product Code</b>	CSB-MP015629BO
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P23935
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Bos taurus (Bovine)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	AGLLKKTG LVGLAVCETP HERLKILYTK ILDVLGHIPK NAA YRKYTEQ ITNEKLSMVK AEPDVKKLEE RLQGGQIEEV ILQAENELSL ARKMIQWKPW EPLVEEPPAS QWKWPI
<b>Source</b>	Mammalian cell
<b>Target Names</b>	NDUFA5
<b>Protein Names</b>	Recommended name: NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5 Alternative name(s): Complex I subunit B13 Complex I-13kD-B Short name= CI-13kD-B NADH-ubiquinone oxidoreductase 13 kDa-B subunit
<b>Expression Region</b>	2-116
<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>	The human NDUFA5 gene codes for the B13 subunit of complex I of the respiratory chain, which transfers electrons from NADH to ubiquinone. The high degree of conservation of NDUFA5 extending to plants and fungi indicates its functional significance in the enzyme complex. The protein localizes to the inner mitochondrial membrane as part of the 7 component-containing, water soluble iron-sulfur protein (IP) fraction of complex I, although its specific role is unknown. It is assumed to undergo post-translational removal of the initiator methionine and N-acetylation of the next amino acid. The predicted secondary structure is primarily alpha helix, but the carboxy-terminal half of the protein has high potential to adopt a coiled-coil form. The amino-terminal part contains a putative beta sheet rich in hydrophobic amino acids that may serve as mitochondrial import signal. Related pseudogenes have also been identified on four other chromosomes.
<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.

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**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.