



Recombinant Human NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 1 (NDUFA1), partial

Product Code	CSB-MP015618HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	O15239
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	RFTNGGKEKRVAHFGYHWSLMERDRRISGVDRYYVSKGLENID
Source	Mammalian cell
Target Names	NDUFA1
Protein Names	Recommended name: NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 1 Alternative name(s): Complex I-MWFE Short name= CI-MWFE NADH-ubiquinone oxidoreductase MWFE subunit
Expression Region	28-70
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	Partial
Target Details	The human NDUFA1 gene codes for an essential component of complex I of the respiratory chain, which transfers electrons from NADH to ubiquinone. It has been noted that the N-terminal hydrophobic domain has the potential to be folded into an alpha-helix spanning the inner mitochondrial membrane with a C-terminal hydrophilic domain interacting with globular subunits of complex I. The highly conserved two-domain structure suggests that this feature is critical for the protein function and might act as an anchor for the NADH:ubiquinone oxidoreductase complex at the inner mitochondrial membrane. However, the NDUFA1 peptide is one of about 31 components of the hydrophobic protein (HP) fraction of complex I which is involved in proton translocation. Thus the NDUFA1 peptide may also participate in that function.
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.