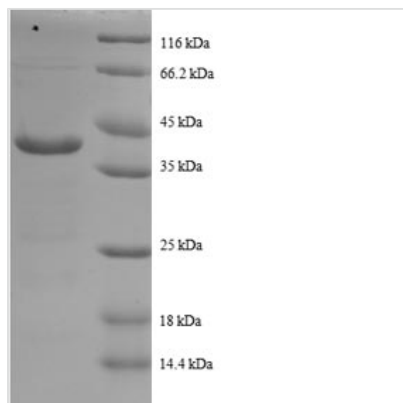




Recombinant Human Cytochrome c oxidase subunit 5A, mitochondrial (COX5A)

Product Code	CSB-RP004144h
Relevance	This is the he A-containing chain of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.
Abbreviation	Recombinant Human COX5A protein
Storage	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.
Uniprot No.	P20674
Alias	Cytochrome c oxidase polypeptide Va
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	SHGSQETDEEFDARWVTYFNKPDIDAWELRKGINTLVITYDMVPEPKIIDAALRA CRRLNDFASTVRILEVVKDKAGPHKEIYPYVIQELRPTLNELGISTPEELGLDKV
Research Area	Metabolism
Source	E.coli
Target Names	COX5A
Expression Region	42-150aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged
Mol. Weight	39.5kDa
Protein Length	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Description

The region for expressing recombinant Human COX5A contains amino acids 42-150. The calculated molecular weight for this COX5A protein is 39.5 kDa. Expression of this COX5A protein is conducted in e.coli. The N-terminal GST tag was fused into the coding gene segment of COX5A, making it easier to detect and purify the COX5A recombinant protein in the later stages of expression and purification.

The human cytochrome c oxidase subunit 5A, mitochondrial (COX5A), is a crucial component of cytochrome c oxidase (complex IV) in the mitochondrial respiratory chain. COX5A is responsible for facilitating the transfer of electrons during oxidative phosphorylation. COX5A plays a pivotal role in the final step of the electron transport chain, where electrons are transferred to molecular oxygen, producing water. This process is essential for ATP synthesis and cellular energy production. Research on COX5A focuses on understanding its role in mitochondrial function, energy metabolism, and its implications in various diseases related to mitochondrial dysfunction.

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

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