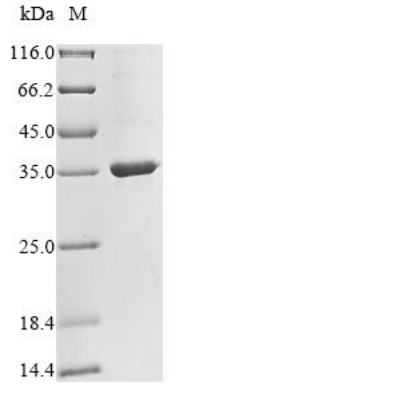
Recombinant Human Ceruloplasmin (CP), partial

Product Code	CSB-EP005874HU
Abbreviation	Recombinant Human CP protein, partial
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.	P00450
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	ILGPQLHADVGDKVKIIFKNMATRPYSIHAHGVQTESSTVTPTLPGETLTYVWKI PERSGAGTEDSACIPWAYYSTVDQVKDLYSGLIGPLIVCRRPYLKVFNPRRKLE FALLFLVFDENESWYLDDNIKTYSDHPEKVNKDDEEFIESNKMHAINGRMFGN LQGLTMHVGDEVNWYLMGMGNEIDLHTVHFHGHSFQYKHRGVYSSDVFDIFP GTYQTLEMFPRTPGIWLLHCHVTDHIHAGM
Research Area	Signal Transduction
Source	E.coli
Target Names	CP
Protein Names	Recommended name: Ceruloplasmin EC= 1.16.3.1 Alternative name(s): Ferroxidase
Expression Region	807-1050aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	35.4 kDa
Protein Length	Partial
Image	 (Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human CP (Ceruloplasmin) was expressed with the amino acid range of 807-1050. The expected molecular weight for the CP (Ceruloplasmin) protein is calculated to be 35.4 kDa. Expression of this CP (Ceruloplasmin) protein is conducted in e.coli. The CP (Ceruloplasmin) gene fragment has been modified by fusing the N-terminal 10xHis tag and C-terminal Myc tag, providing convenience in detecting and purifying the recombinant CP (Ceruloplasmin) protein during the following stages.

Human ceruloplasmin (CP) is a multifunctional glycoprotein primarily known for its role in copper metabolism. It functions as a copper transport protein, facilitating the incorporation of copper into ferroxidase sites. This enzyme plays a crucial role in iron homeostasis by converting ferrous iron to its ferric form, aiding in iron transport and storage. Beyond its role in metal metabolism, ceruloplasmin exhibits antioxidant properties, scavenging free radicals and protecting cells from oxidative stress. Research on ceruloplasmin extends to its involvement in various physiological processes, including inflammation, immunity, and neurodegenerative disorders. Understanding its diverse functions contributes to insights into metal homeostasis, oxidative balance, and potential therapeutic avenues for conditions associated with copper dysregulation.

Shelf Life

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