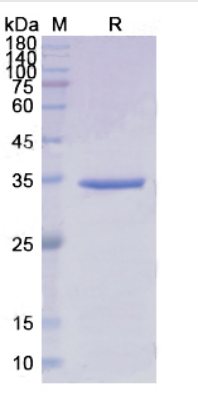
CP Human Recombinant Protein

PRODUCT OVERVIEW

Product Name	CP, Recombinant Protein
Full Product Name	Recombinant Human CP, N-His
Product Gene Name	CP recombinant protein
Product Synonym Names	CP; Ceruloplasmin; Ferroxidase
Host	E coli
Form/Format	Lyophilized from a solution in PBS pH7.4, 0.02% NLS, 1mM EDTA, 4% Trehalose, 1% Mannitol.
Purity/Purification	>90% as determined by SDS-PAGE
Preparation and Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 degree C for one week. Store at -20 to -80 degree C for twelve months from the date of receipt.
Molecular Weight	122,205 Da
Sequence Positions	Asp789-Gly1065
Chromosome Location	Chromosome: 3; NC_000003.11 (148880197..148939832, complement). Location: 3q23-q25
OMIM	117700
3D Structure	ModBase 3D Structure for P00450
Species	Human
Reconstitution	Reconstitute in sterile water for a stock solution.
Product Categories/Family for CP recombinant protein	Recombinant Proteins
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for CP recombinant protein	SDS-PAGE (SDS), Western Blot (WB), ELISA (EIA), Immunogen
Related Product Information for CP recombinant protein	MBS1572774 is a recombinant protein targeting CP. Also known as Recombinant Human CP, N-His. Host: E coli.
Other Notes	Small volumes of CP recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



SDS-Page of CP recombinant protein
SDS PAGE for recombinant Human CP protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CP. It may not necessarily be applicable to this product.

NCBI GI #	4557485
NCBI GeneID	1356
NCBI Accession #	NP_000087.1
UniProt Primary Accession #	P00450
UniProt Secondary Accession #	Q14063; Q2PP18; Q9UKS4
UniProt Related Accession #	P00450
GenBank Nucleotide #	NM_000096.3
NCBI Official Full Name	ceruloplasmin
NCBI Official Synonym Full Names	ceruloplasmin (ferroxidase)
NCBI Official Symbol	CP
NCBI Official Synonym Symbols	CP-2
UniProt Protein Name	Ceruloplasmin
UniProt Synonym Protein Names	Ferroxidase
Protein Family	Ceruloplasmin
UniProt Gene Name	CP
UniProt Entry Name	CERU_HUMAN
NCBI Protein Information	ceruloplasmin
NCBI Summary for CP	The protein encoded by this gene is a metalloprotein that binds most of the copper in plasma and is involved in the peroxidation of Fe(II)transferrin to Fe(III) transferrin. Mutations in this gene cause aceruloplasminemia, which results in iron accumulation and tissue damage, and is associated with diabetes and neurologic abnormalities. Two transcript variants, one protein-coding and the other not protein-coding, have been found for this gene. [provided by RefSeq, Feb 2012]

UniProt Comments for CP	CP: Ceruloplasmin is a blue, copper-binding (6-7 atoms per molecule) glycoprotein. It has ferroxidase activity oxidizing Fe(2+) to Fe(3+) without releasing radical oxygen species. It is involved in iron transport across the cell membrane. Provides Cu(2+) ions for the ascorbate-mediated deaminase degradation of the heparan sulfate chains of GPC1. May also play a role in fetal lung development or pulmonary antioxidant defense. Defects in CP are the cause of aceruloplasminemia (ACERULOP). It is an autosomal recessive disorder of iron metabolism characterized by iron accumulation in the brain as well as visceral organs. Clinical features consist of the triad of retinal degeneration, diabetes mellitus and neurological disturbances. Ceruloplasmin levels are decreased in Wilson disease, in which copper cannot be incorporated into ceruloplasmin in liver because of defects in the copper-transporting ATPase 2. Belongs to the multicopper oxidase family. Protein type: Secreted; EC 1.16.3.1; Cofactor and Vitamin Metabolism - porphyrin and chlorophyll; Oxidoreductase; Secreted, signal peptide Chromosomal Location of Human Ortholog: 3q23-q25 Cellular Component: extracellular space; lysosomal membrane; extracellular region Molecular Function: ferroxidase activity; copper ion binding; chaperone binding Biological Process: cellular iron ion homeostasis; copper ion transport; transmembrane transport Disease: Aceruloplasminemia
Research Articles on CP	**1.** study of effect of occupational exposure to lead among metallurgy workers in Poland on blood levels of transferrin (TRF), ceruloplasmin (CER) and haptoglobin (HPG): Data suggest that blood levels of copper and CER are raised with lead exposure.
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