

AR09653PU-N**Human CCS / SOD4 (1-274, His-tag) - Purified**

Alternate names:	SOD-4, Superoxide Dismutase Copper Chaperone
Quantity:	0.1 mg
Concentration:	1.0 mg/ml (determined by Bradford assay)
Background:	CCS is essential for the incorporation of copper into SOD-1, and therefore is necessary for its enzymatic activity. CCS prevents copper ions from binding to intracellular copper scavengers and provides the SOD-1 enzyme with the necessary copper cofactor. CCS escorts copper only to SOD-1 and fails to deliver copper to proteins in the mitochondria, nucleus or secretory pathway. While many tissues express CCS, the chaperone is most abundant in the kidney, liver and Purkinje cells in the neuropil of the central nervous system.
Uniprot ID:	O14618
NCBI:	NP_005116
GeneID:	9973
Species:	Human
Source:	E. coli
Format:	State: Liquid purified protein Purity: >90% by SDS - PAGE Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 1mM DTT, 10% glycerol
Description:	Recombinant human CCS protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. AA Sequence: <u>MGSSHHHHHH</u> <u>SSGLVPRGSH</u> MASDSGNQGT LCTLEFAVQM TCQSCVDAVR KSLQGVAGVQ DVEVHLEDQM VLVHTTLPST EVQALLEGTG RQAVLKGMGS GQLQNLGAAV AILGGPGTVQ GVVRFQLQTP ERCLIEGTID GLEPGLHGLH VHQYGLTNN CNSCGNHFNPDGASHGGPQD SDRHRGDLGN VRADADGRAI FRMEDEQLKV WDVIGRSLII DEGEDDLGRG GHPLSKITGN SGERLACGII ARSAGLFQNP KQICSCDGLT IWEERGRPIA GKGRKESAQP PAHL Molecular weight: 31.2 kDa kDa (294aa), confirmed by MALDI-TOF
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	Romerius P., et al. (2010) Clin Cancer Res. 16(15):3843-50. Seetharaman SV., et al. (2010) Biochemistry. 49(27):5714-25.

Pictures:

Recombinant human CCS, 1-274 aa, His-tagged

