



Recombinant Human Copper Chaperone for Superoxide Dismutase Protein Datasheet

Catalog Number: PR27283

Product Type: Recombinant Protein

Source: E. Coli

Amino Acid Sequence: MGSSHHHHHH SGLVPRGSH MASDSGNQGT LCTLEFAVQM TCQSCVD AVR KSLQGVAGVQ DVEVHLEDQM VLVHTTLP SQ EVQALLEG TG RQAVLKG MGS GQLQNLGAAV AILGGPGTVQ GVVRFLQLTP ERCLIEGTID GLEPGLHGLH VHQYGDLTNN CNSCGNHFNPDGASHGGPQD SDRHRGDLGN VRADADGRAI FRMEDEQLKV WDVIGRSLII DEGEDDLGRG GHPLSKITGN SGERLACGII ARSAGLFQNP KQICSCDGLT IWEERGRPIA GKGRKESAQP PAHL.

Description/Molecular Mass: CCS is vital for the integration of copper into SOD-1, and as a result is needed for its enzymatic activity. CCS inhibits copper ions from binding to intracellular copper scavengers and provides the SOD-1 enzyme with the required copper cofactor. CCS escorts copper just to SOD-1 and is unable to deliver copper to proteins in the mitochondria, nucleus or secretory pathway. Although many tissues express CCS, the chaperone is most abundant in the kidney, liver and Purkinje cells in the neuropil of the central nervous system.

CCS Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 294 amino acids (1-274 a.a.) and having a molecular weight of 31.2 kDa. The CCS is fused to a 20 a.a. His-Tag at N-terminus and purified by proprietary chromatographic techniques.

Purity: Greater than 90.0% as determined by:
(a) Analysis by SDS-PAGE.

Format: The CCS protein solution (1mg/1ml) contains 20 mM Tris-HCl buffer (pH8.0), 1mM DTT, 0.2M NaCl and 10% glycerol.

Storage: Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage, it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

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03/08v1

www.neuromics.com

Neuromics • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail pshuster@neuromics.com