

Product datasheet for **AP21158PU-N**

CCS Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Western Blot: 1/500 - 1/1000.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of CCCS protein. (region surrounding Pro271)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 32 kDa
Gene Name:	copper chaperone for superoxide dismutase
Database Link:	Entrez Gene 9973 Human O14618



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Background:

Cu-Zn superoxide dismutase-1 (SOD-1) is a well characterized cytosolic scavenger of oxygen free radicals that requires copper and zinc binding to potentiate its enzymatic activity. Copper chaperone for SOD-1 (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. CCS interacts with both wildtype and mutated forms of SOD-1 through CCS domains that are homologous in SOD-1. CCS exists as a homodimer that may form a heterodimer with SOD-1 during copper loading. 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. The gene for CCS maps to human chromosome 11q13.

Synonyms:

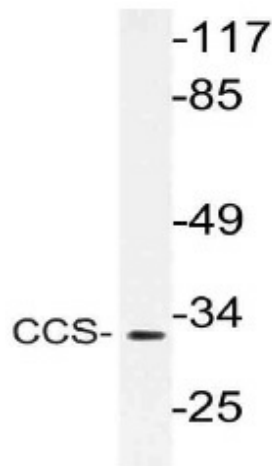
Superoxide Dismutase Copper Chaperone, SOD-4

Protein Families:

Druggable Genome

Protein Pathways:

Amyotrophic lateral sclerosis (ALS)

Product images:

Western blot (WB) analysis of CCS antibody (Cat.- No.: AP21158PU-N) in extracts from Jurkat cells.