

**AP21158PU-N****Polyclonal Antibody to CCS / SOD4 - Aff - Purified**

<b>Alternate names:</b>	SOD-4, Superoxide Dismutase Copper Chaperone
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	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.
<b>Uniprot ID:</b>	<a href="#">O14618</a>
<b>NCBI:</b>	<a href="#">NP_005116</a>
<b>GeneID:</b>	<a href="#">2973</a>
<b>Host:</b>	Rabbit
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Affinity chromatography (> 95% (by SDS-PAGE) <b>Buffer System:</b> Phosphate buffered saline (PBS), pH 7.2. <b>Preservatives:</b> 0.05% sodium azide
<b>Applications:</b>	<b>Western Blot:</b> 1/500 - 1/1000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Molecular Weight:</b>	~ 32 kDa
<b>Specificity:</b>	This antibody detects endogenous levels of CCCS protein. (region surrounding Pro271)
<b>Species Reactivity:</b>	<b>Tested:</b> Human.
<b>Storage:</b>	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**Pictures:**

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

