

Anti-CCS Picoband Antibody

Catalog # ABO10055

Specification

Anti-CCS Picoband Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format **Description** Babbit InG polyclonal WB, IHC-P <u>O14618</u> Rabbit Human, Mouse, Rat Polyclonal Lyophilized

Rabbit IgG polyclonal antibody for Copper chaperone for superoxide dismutase(CCS) detection. Tested with WB, IHC-P in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CCS Picoband Antibody - Additional Information

Gene ID 9973

Other Names Copper chaperone for superoxide dismutase, Superoxide dismutase copper chaperone, CCS

Calculated MW 29041 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat

Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization Cytoplasm .

Tissue Specificity Ubiquitous.

Protein Name Copper chaperone for superoxide dismutase

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human CCS (174-209aa DADGRAIFRMEDEQLKVWDVIGRSLIIDEGEDDLGR), different from the related mouse sequence by six amino acids, and from the related rat sequence by seven amino acids.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-CCS Picoband Antibody - Protein Information

Name CCS (<u>HGNC:1613</u>)

Function Delivers copper to copper zinc superoxide dismutase (SOD1).

Cellular Location Cytoplasm.

Tissue Location Ubiquitous.

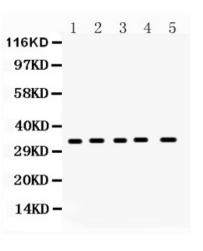
Anti-CCS Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

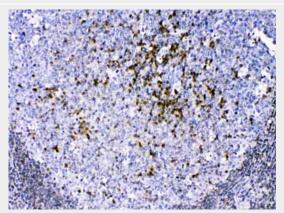
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CCS Picoband Antibody - Images





Western blot analysis of CCS expression in rat brain extract (lane 1), rat spleen extract (lane 2), mouse brain extract (lane 3), mouse spleen extract (lane 4) and 293T whole cell lysates (lane 5). CCS at 34KD was detected using rabbit anti- CCS Antigen Affinity purified polyclonal antibody (Catalog #ABO10055) at 0.5 $\hat{1}_{4}^{1}$ g/mL. The blot was developed using chemiluminescence (ECL) method .



CCS was detected in paraffin-embedded sections of human tonsil tissues using rabbit anti- CCS Antigen Affinity purified polyclonal antibody (Catalog # ABO10055) at 1 $\hat{1}/_4$ g/mL. The immunohistochemical section was developed using SABC method .

Anti-CCS Picoband Antibody - Background

Copper chaperone for superoxide dismutase is a metalloprotein that is responsible for the delivery of Cu to superoxide dismutase (SOD1). In humans the protein is encoded by the CCS gene. And this gene is mapped to chromosome 11q13 by fluorescence in situ hybridization. The CCS protein is present in mammals and most eukaryotes including yeast. The structure of CCS is composed of three distinct domains that are necessary for its function. Although CCS is important for many organisms, there are CCS independent pathways for SOD1, and many species lack CCS all together, such as C. elegans.