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# CSAD Rabbit pAb

CSAD Rabbit pAb
Catalog # AP54636

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | Q9Y600 |
| **Reactivity** | Mouse, Rat |
| **Predicted** | Human, Dog, Horse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 55023 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human CSAD |
| **Epitope Specificity** | 401-493/493 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the group II decarboxylase family. |
| **SUBUNIT** | Homodimer. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | CSAD is a 493 amino acid protein that exists as a homodimer and belongs to the group II decarboxylase family. CSAD catalyzes the conversion of 3-sulfino-L-alanine to hypotaurine and carbon dioxide, binds pyridoxal phosphate as a cofactor and undergoes alternative splicing to produce three isoforms. The gene encoding CSAD maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders. |

## Additional Information

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| **Gene ID** | 51380 |
| **Other Names** | Cysteine sulfinic acid decarboxylase, 4.1.1.29, Cysteine-sulfinate decarboxylase, Sulfinoalanine decarboxylase, CSAD, CSD |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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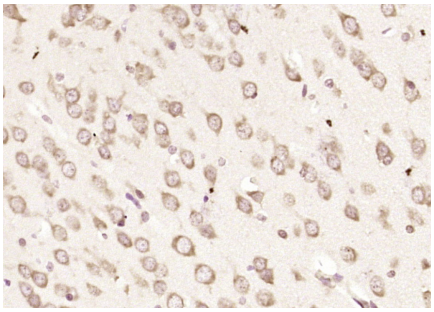
| **Name** | CSAD |
| **Synonyms** | CSD |
| **Function** | Catalyzes the decarboxylation of L-aspartate, 3-sulfino-L- alanine (cysteine sulfinic acid), and L-cysteate to beta-alanine, hypotaurine and taurine, respectively. The preferred substrate is 3- sulfino-L-alanine. Does not exhibit any decarboxylation activity toward glutamate. |
| **Tissue Location** | Expressed in liver and brain. Also expressed in both astrocytes and neurons, but lower levels are expressed in astrocytes. |

## Background

CSAD is a 493 amino acid protein that exists as a homodimer and belongs to the group II decarboxylase family. CSAD catalyzes the conversion of 3-sulfino-L-alanine to hypotaurine and carbon dioxide, binds pyridoxal phosphate as a cofactor and undergoes alternative splicing to produce three isoforms. The gene encoding CSAD maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

## Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CSAD) Polyclonal Antibody, Unconjugated (AP54636) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.