

CTSD Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2040a

Specification

CTSD Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**

WB, IHC, E <u>P07339</u> Human Mouse Monoclonal IgG1 44.6kDa KDa

This gene encodes a lysosomal aspartyl protease composed of a dimer of disulfide-linked heavy and light chains, both produced from a single protein precursor. This proteinase, which is a member of the peptidase C1 family, has a specificity similar to but narrower than that of pepsin A. Transcription of this gene is initiated from several sites, including one which is a start site for an estrogen-regulated transcript. Mutations in this gene are involved in the pathogenesis of several diseases, including breast cancer and possibly Alzheimer disease.

Immunogen Purified recombinant fragment of human CTSD (AA: 1-100) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

CTSD Antibody - Additional Information

Gene ID 1509

Other Names Cathepsin D, 3.4.23.5, Cathepsin D light chain, Cathepsin D heavy chain, CTSD, CPSD

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CTSD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CTSD Antibody - Protein Information



Name CTSD

Synonyms CPSD

Function

Acid protease active in intracellular protein breakdown. Plays a role in APP processing following cleavage and activation by ADAM30 which leads to APP degradation (PubMed:27333034). Involved in the pathogenesis of several diseases such as breast cancer and possibly Alzheimer disease.

Cellular Location

Lysosome. Melanosome. Secreted, extracellular space. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. In aortic samples, detected as an extracellular protein loosely bound to the matrix (PubMed:20551380)

Tissue Location

Expressed in the aorta extracellular space (at protein level) (PubMed:20551380). Expressed in liver (at protein level) (PubMed:1426530).

CTSD 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>