10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CTSD Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2040a

Product Information

Application	WB, IHC, E
Primary Accession	P07339
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2H4H5
Isotype	IgG1
Calculated MW	44552
Description	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

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.

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).

References

Clin Biochem. 2013 Dec;46(18):1808-11.Cancer Lett. 2012 Oct 28;323(2):208-14.

Images