

CTSF Antibody / Cathepsin F (FY13174)

Catalog No.	Formulation	Size
FY13174	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q9UBX1
Applications	Western Blot: 0.25-0.5ug/ml Immunohistochemistry: 2-5ug/ml Flow Cytometry: 1-3ug/million cells
Limitations	This CTSF antibody is available for research use only.

Description

CTSF antibody detects Cathepsin F, a lysosomal cysteine protease that mediates protein degradation and turnover in endosomal and lysosomal compartments. The UniProt recommended name is Cathepsin F (CTSF). This protease belongs to the papain-like family of cysteine cathepsins involved in cellular protein recycling and immune antigen processing.

Functionally, CTSF antibody identifies a 484-amino-acid preproenzyme that undergoes proteolytic maturation into active heavy and light chains. Cathepsin F participates in degradation of intracellular and endocytosed proteins, contributing to antigen presentation via MHC class II molecules. It also influences apoptosis, tissue remodeling, and neurodegenerative processes through regulated proteolysis.

The CTSF gene is located on chromosome 11q13.1 and is expressed in brain, liver, spleen, and macrophages. Cathepsin F maintains lysosomal proteolytic balance and participates in innate immune defense through controlled protein breakdown and turnover.

Pathologically, CTSF mutations cause Kufs disease type B, an adult-onset neuronal ceroid lipofuscinosis characterized

by progressive neurodegeneration. Dysregulated Cathepsin F expression has also been associated with cancer progression and inflammatory diseases. Research using CTSF antibody supports studies in lysosomal biology, protease regulation, and neurodegenerative mechanisms.

CTSF antibody is validated for western blotting, immunohistochemistry, and immunofluorescence to detect lysosomal proteases. NSJ Bioreagents provides CTSF antibody reagents optimized for proteolysis, neurobiology, and cellular homeostasis research.

Structurally, Cathepsin F features an N-terminal cystatin-like domain and a papain-like catalytic domain containing the conserved cysteine-histidine-asparagine catalytic triad. This antibody enables examination of CTSFÂ's role in lysosomal degradation and neuronal maintenance.

Application Notes

Optimal dilution of the CTSF antibody should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human Cathepsin F/CTSF was used as the immunogen for the CTSF antibody.

Storage

After reconstitution, the CTSF antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.