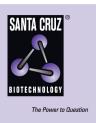
SANTA CRUZ BIOTECHNOLOGY, INC.

cathepsin A (19675): sc-73765



BACKGROUND

The cathepsin family of proteolytic enzymes include several diverse classes of proteases. Cathepsins B, L, H, K, S and O comprise the cysteine protease class. Cathepsins D and E comprise the aspartyle protease class. The serine protease class includes cathepsin G. Cathepsins function in cellular metabolism and participate in peptide biosynthesis and protein degradation. Cathepsin A, a serine carboxypeptidase, exists in a high molecular weight lysosomal complex with β -Galactosidase (β -Gal) and α -neuraminidase (Neu1). Cathepsin A functions to protect β -Gal and Neu1 from intralysosomal proteolysis. Deficiencies in cathepsin A lead to deficiencies in β -Gal and Neu1. The gene encoding human cathepsin A maps to chromosome 20q13.1. Mutations in this gene cause glactosialidosis, a lysosomal storage disorder resulting from the β -Gal and Neu1 deficiencies.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ppgb (mouse) mapping to 2 H3.

SOURCE

cathepsin A (19675) is a rat monoclonal antibody raised against cathepsin A corresponding to amino acids 24-474 of mouse origin.

PRODUCT

Each vial contains 100 $\mu g~lg G_{2b}$ in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

cathepsin A (19675) is recommended for detection of cathepsin A of mouse origin by immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for cathepsin A siRNA (m): sc-41470, cathepsin A shRNA Plasmid (m): sc-41470-SH and cathepsin A shRNA (m) Lentiviral Particles: sc-41470-V.

Molecular Weight of cathepsin A: 55 kDa.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.