SANTA CRUZ BIOTECHNOLOGY, INC.

cathepsin A (m): 293T Lysate: sc-126581

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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3. Shi, G.P., Chapman, H.A., Bhairi, S.M., DeLeeuw, C., Reddy, V.Y. and Weiss, S.J. 1995. Molecular cloning of human cathepsin O, a novel endoproteinase and homologue of rabbit OC2. FEBS Lett. 357: 129-134.
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CHROMOSOMAL LOCATION

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

PRODUCT

cathepsin A (m): 293T Lysate represents a lysate of mouse cathepsin A transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

cathepsin A (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive cathepsin A antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

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.