



cathepsin 6 (J14h): sc-80514

BACKGROUND

The cathepsin family of proteolytic enzymes contains several diverse classes of proteases. Cathepsin 6 is a member of the C1A papain family. It is a cysteine peptidase exclusively expressed in labyrinthine trophoblastic cells of the murine placenta where it colocalizes with its closest relative, Cathepsin J/P. Cathepsin 6 may be involved in mediating the gas and nutrient exchange between maternal and fetal blood. In addition, it may play a role in immunological modulation or processing of secretory protein factors. Cathepsin 6 expression is regulated during mouse embryonic development. The mouse, placentally expressed cathepsin genes, Cathepsin M, J/P, Q, R, 1, 2, 3 and 6, are located in a tight cluster on chromosome 13. They are found in mice and rats, but homologs of these genes are not found in humans.

REFERENCES

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STORAGE

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

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Cts6 (mouse) mapping to 13 B2.

SOURCE

cathepsin 6 (J14h) is a rat monoclonal antibody raised against full-length recombinant cathepsin 6 of mouse origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

cathepsin 6 (J14h) is recommended for detection of cathepsin 6 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for cathepsin 6 siRNA (m): sc-77419, cathepsin 6 shRNA Plasmid (m): sc-77419-SH and cathepsin 6 shRNA (m) Lentiviral Particles: sc-77419-V.

Molecular Weight of cathepsin 6: 41 kDa.

SELECT PRODUCT CITATIONS

1. Liu, D.H., Huang, X., Guo, X., Meng, X.M., Wu, Y.S., Lu, H.L., Zhang, C.M., Kim, Y.C. and Xu, W.X. 2014. Voltage dependent potassium channel remodeling in murine intestinal smooth muscle hypertrophy induced by partial obstruction. *PLoS ONE* 9: e86109.

RESEARCH USE

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