

# cathepsin K (C-16): sc-6506

## BACKGROUND

The cathepsin family of proteolytic enzymes contains several diverse classes of proteases. The cysteine protease class comprises cathepsins B, L, H, K, S and O. The aspartyl protease class is composed of cathepsins D and E. cathepsin G is in the serine protease class. Most cathepsins are lysosomal and each is involved in cellular metabolism, participating in various events such as peptide biosynthesis and protein degradation. cathepsin K expression is highest in bone, cartilage and skeletal muscle. The strongest mRNA levels are revealed in osteoclasts.

## CHROMOSOMAL LOCATION

Genetic locus: CTSK (human) mapping to 1q21.3; Ctsk (mouse) mapping to 3 F2.1.

## SOURCE

cathepsin K (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of cathepsin K of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6506 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

cathepsin K (C-16) is recommended for detection of cathepsin K of mouse, rat and human 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

cathepsin K (C-16) is also recommended for detection of cathepsin K in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for cathepsin K siRNA (h): sc-29936, cathepsin K siRNA (m): sc-29937, cathepsin K shRNA Plasmid (h): sc-29936-SH, cathepsin K shRNA Plasmid (m): sc-29937-SH, cathepsin K shRNA (h) Lentiviral Particles: sc-29936-V and cathepsin K shRNA (m) Lentiviral Particles: sc-29937-V.

Molecular Weight of cathepsin K: 39 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, RAW 264.7 whole cell lysate: sc-2211 or cathepsin K (h): 293T Lysate: sc-158352.

## STORAGE

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

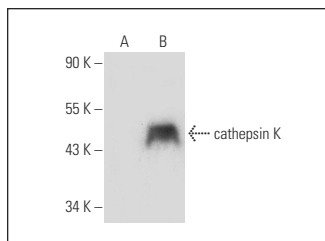
## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

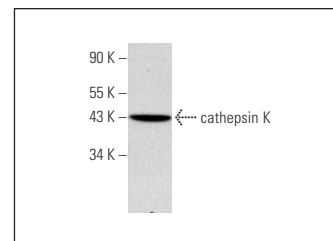
## RESEARCH USE

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

## DATA



cathepsin K (C-16): sc-6506. Western blot analysis of cathepsin K expression in non-transfected: sc-117752 (A) and human cathepsin K transfected: sc-158352 (B) 293T whole cell lysates.



cathepsin K (C-16): sc-6506. Western blot analysis of cathepsin K expression in MCF7 whole cell lysate.

## SELECT PRODUCT CITATIONS

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