

# cystatin C (h): 293T Lysate: sc-111929

## BACKGROUND

cystatin C is a cysteine (thiol) protease inhibitor that belongs to the type II cystatin gene superfamily and is the most abundant extracellular inhibitor of cysteine proteases. cystatin C is a constitutively secreted, amyloidogenic protein, which forms a two-fold symmetric dimer and modulates both cysteine protease activity and the expression of class II MHC molecules. Expression of cystatin C is an indicator of kidney function and glomerular filtration rate. Mutations in the cystatin C gene can lead to protein aggregates, which are implicated in hereditary amyloid angiopathy (HCAA) and cerebral hemorrhage. Although both wildtype and mutant cystatin C are capable of forming concentration dependent inactive dimers, mutant cystatin C dimerizes at lower concentrations and is more susceptible to serine proteases, which may facilitate aggregation. In neuronal cells, oxidative stress stimulates expression of cystatin C, which may positively regulate apoptosis.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CST3 (human) mapping to 20p11.21.

## RESEARCH USE

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

## PRODUCT

cystatin C (h): 293T Lysate represents a lysate of human cystatin C transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

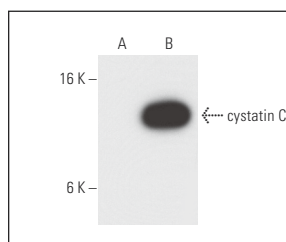
## APPLICATIONS

cystatin C (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive cystatin C antibodies. Recommended use: 10-20 µl per lane.

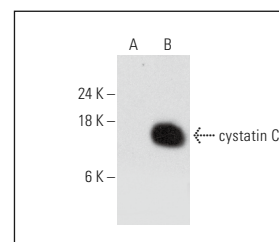
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

cystatin C (T12): sc-73879 is recommended as a positive control antibody for Western Blot analysis of enhanced human cystatin C expression in cystatin C transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## DATA



cystatin C (T12): sc-73879. Western blot analysis of cystatin C expression in non-transfected: sc-117752 (A) and human cystatin C transfected: sc-111929 (B) 293T whole cell lysates.



cystatin C (A-10): sc-515732. Western blot analysis of cystatin C expression in non-transfected: sc-117752 (A) and human cystatin C transfected: sc-111929 (B) 293T whole cell lysates.

## 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.

## PROTOCOLS

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