

cystatin A (C-12): sc-33279

BACKGROUND

cystatin A (also designated STF1, STFA, stefin A or cystatin AS) and cystatin B (also designated PME, CST6, STFB, CPI-B, stefin B and liver thiol proteinase inhibitor) are thiol protease inhibitors that form complexes with Papain and the cathepsins B, H and L. cystatin A, a cytoplasmic protein, is one of the precursor proteins of the cornified cell envelope in keratinocytes and plays a role in epidermal development and maintenance. cystatin B protects against intracellular proteases leaking out of lysosomes and is primarily expressed in heart, liver and kidney.

REFERENCES

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- Kos, J., et al. 1998. Cysteine proteinases and their endogenous inhibitors: target proteins for prognosis, diagnosis and therapy in cancer. *Oncol. Rep.* 5: 1349-1361.
- Takahashi, H., et al. 1998. Structure and transcriptional regulation of the human cystatin A gene. The 12-O-tetradecanoylphorbol-13-acetate (TPA) responsive element-2 site (-272 to -278) on cystatin A gene is critical for TPA-dependent regulation. *J. Biol. Chem.* 273: 17375-17380.
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- Jenko, S., et al. 2004. Different propensity to form amyloid fibrils by two homologous proteins—Human stefins A and B: searching for an explanation. *Proteins* 55: 417-425.

CHROMOSOMAL LOCATION

Genetic locus: CSTA (human) mapping to 3q21.1.

SOURCE

cystatin A (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of cystatin A 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-33279 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

cystatin A (C-12) is recommended for detection of cystatin A of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

cystatin A (C-12) is also recommended for detection of cystatin A in additional species, including porcine.

Suitable for use as control antibody for cystatin A siRNA (h): sc-44430, cystatin A shRNA Plasmid (h): sc-44430-SH and cystatin A shRNA (h) Lentiviral Particles: sc-44430-V.

Molecular Weight of cystatin A: 11 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **cystatin A (B-11): sc-376759** or **cystatin A (WR23/2/3): sc-32803**, our highly recommended monoclonal alternatives to cystatin A (C-12).