

# cystatin 8 (Q-18): sc-87669

## BACKGROUND

The cystatin superfamily is a well-established family of cysteine protease inhibitors. All true cystatins inhibit cysteine peptidases of the papain family, such as cathepsins, while some also inhibit legumain family enzymes. The CRES (cystatin-related epididymal spermatogenic) protein defines a new subgroup in the family 2 cystatins of the cystatin superfamily. CRES proteins lack two of the three consensus sites necessary for the cystatin inhibition of C1 cysteine proteases. They are also preferentially expressed in postmeiotic germ cells, the proximal caput epididymidis, and anterior pituitary gonadotrophs. Therefore, CRES proteins may perform unique and tissue-specific functions in the reproductive and neuroendocrine systems. As a member of the CRES subfamily, Cystatin 8 is a 142 amino acid protein that is expressed in the proximal caput region of the epididymis, where it performs a specialized role during sperm development and maturation.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: CST8 (human) mapping to 20p11.21.

## SOURCE

cystatin 8 (Q-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of cystatin 8 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-87669 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

cystatin 8 (Q-18) is recommended for detection of cystatin 8 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); non cross-reactive with other cystatin family members.

Suitable for use as control antibody for cystatin 8 siRNA (h): sc-77081, cystatin 8 shRNA Plasmid (h): sc-77081-SH and cystatin 8 shRNA (h) Lentiviral Particles: sc-77081-V.

Molecular Weight of cystatin 8: 16 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.

## RESEARCH USE

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

## PROTOCOLS

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