SANTA CRUZ BIOTECHNOLOGY, INC.

granzyme K (T-22): sc-133637

BACKGROUND

The granzyme family of proteins belong to the larger peptidase S_1 family. Granzyme A and granzyme B are serine proteases that facilitate apoptotic signaling in cytotoxic T lymphocytes (CTL) and natural killer (NK) cells. Within the granules of activated CTLs, granzyme A and granzyme B are processed and converted to their active forms by the lysosomal cysteine protease cathepsin C. Once cleaved, these active proteases target distinct substrates for proteolysis and, thereby, mediate apoptosis through two different pathways. Granzyme H localizes to cytoplasmic granules of cytolytic T lymphocytes and is important for target cell lysis in cell-mediated immune responses. Granzyme K (GMZK), also designated granzyme 3 or NK-Tryptase-2 (NK-TRYP-2), contains one peptidase S_1 domain. Granzyme K is a serine protease localizing to the granules of natural killer cells and cytotoxic T lymphocytes. It is primarily expressed in thymus, lung, spleen and peripheral blood leukocytes.

REFERENCES

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: GZMK (human) mapping to 5q11.2.

SOURCE

granzyme K (T-22) is an affinity purified rabbit polyclonal antibody raised against synthetic granzyme K peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

granzyme K (T-22) is recommended for detection of granzyme K of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for granzyme K siRNA (h): sc-60759, granzyme K shRNA Plasmid (h): sc-60759-SH and granzyme K shRNA (h) Lentiviral Particles: sc-60759-V.

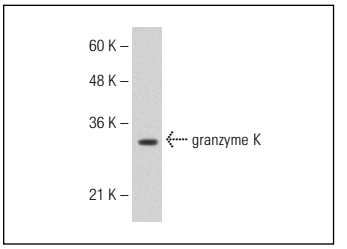
Molecular Weight of granzyme K: 28 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



granzyme K (T-22): sc-133637. Western blot analysis of granzyme K expression in Hep G2 whole cell lysate.

STORAGE

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