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granzyme H (h2): 293T Lysate: sc-170162

BACKGROUND

The Granzyme family of proteins belong to the larger peptidase S1 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, also designated cytotoxic T lymphocyte proteinase, cathepsin G-like 2 (CTSG2) or cytotoxic serine protease C (CSP-C), contains one peptidase S1 domain. Granzyme H localizes to cytoplasmic granules of cytolytic T lymphocytes and is important for target cell lysis in cell-mediated immune responses.

REFERENCES

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2. Trapani, J.A., et al. 1996. A putative role in the mechanism of cytotoxic lymphocyte-mediated apoptosis. Localization of granzyme B in the nucleus. *J. Biol. Chem.* 271: 4127-4133.
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6. Sedelies, K.A., et al. 2004. Discordant regulation of granzyme H and granzyme B expression in human lymphocytes. *J. Biol. Chem.* 279: 26581-26587.
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CHROMOSOMAL LOCATION

Genetic locus: GZMH (human) mapping to 14q12.

PRODUCT

granzyme H (h2): 293T Lysate represents a lysate of human granzyme H transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

granzyme H (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive granzyme H 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.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.