

Perforin 1 (241-555): sc-4519 WB

BACKGROUND

The body's major defense against virus-infected and tumorigenic cells is cytotoxic T lymphocyte (CTL)-mediated cytotoxicity, which also plays a role in autoimmune diseases and transplant rejection. During CTL-mediated cytotoxicity, CTL granules containing perforin are exocytosed. Perforin is a pore-forming protein that facilitates the entry of cytotoxic serine proteases, such as granzymes, into target cells by forming transmembrane channels in target cell membranes. Perforin is primarily expressed in cytotoxic T lymphocytes (CTL) and natural killer (NK) cells, but has more recently been observed in an astrocyte population of the human brain. It has been shown that abrogation of perforin function by Ca^{++} -complexing agents leads to decreased levels of necrosis, demonstrating that both necrosis and apoptosis contribute to CTL-mediated cytotoxicity. Perforin activity has been shown to be induced by IL-2, IL-3, IL-4, IL-6 and to a lesser degree, TNF and IFN- γ .

REFERENCES

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SOURCE

Perforin 1 (241-555) is expressed in *E. coli* as a 62 kDa tagged fusion protein corresponding to amino acids 241-555 of Perforin 1 of human origin.

PRODUCT

Perforin 1 (241-555) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 μ g in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

Perforin 1 (241-555) is suitable as a Western blotting control for sc-7417, sc-7418 and 9105.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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