#3693 Store at -20°C

Perforin Antibody (Mouse Specific)

Cell Signaling TECHNOLOGY®

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

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For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #18646
Swiss-Prot Acc. #P10820

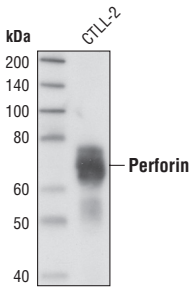
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	M	70-75 kDa	Rabbit**

Background: Granzymes are a family of serine proteases expressed by cytotoxic T lymphocytes and natural killer (NK) cells and are key components of immune responses to pathogens and transformed cells (1). Granzymes are synthesized as zymogens and are processed into mature enzymes by cleavage of a leader sequence. They are released by exocytosis in lysosomal-like granules containing perforin, a membrane pore-forming protein. Granzyme B has the strongest apoptotic activity of all the granyzmes as a result of its caspase-like ability to cleave substrates at aspartic acid residues thereby activating procaspases directly and cleaving downstream caspase substrates (2,3).

Perforin is a pore-forming protein that faciliates the entry of cytotoxic serine proteases, such as granzymes, into target cells (4). Perforin is primarily expressed in cytotoxic T lymphocytes and NK cells.

Specificity/Sensitivity: Perforin Antibody (Mouse Specific) detects endogenous levels of total Perforin protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding leucine 349 of mouse perforin.



Western blot analysis of extracts from CTLL-2 cells, using Perforin Antibody (Mouse Specific).

Background References:

(1) Trapani, J.A. (2001) *Genome Biol.* 2, REVIEWS 3014.

(2) Lord, S.J. et al. (2003) *Immunol Rev* 193, 31–38.

(3) Trapani, J.A. and Sutton, V.R. (2003) *Curr. Opin. Immunol.* 15, 533–543.

(4) Catalfamo, M. and Henkart, P.A. (2003) *Curr. Opin. Immunol.* 15, 522–527.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

Recommended Antibody Dilutions:

Western blotting	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.