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#3693

Perforin Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

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|---------------------------|-------------------------|-----------------------------------|---------------------------|----------------------------------|-------------------------------|---------------------------------|
| Applications: W | Reactivity: M | Sensitivity: Endogenous | MW (kDa): 70-75 | Source/Isotype: Rabbit | UniProt ID: #P10820 | Entrez-Gene Id: 18646 |
|---------------------------|-------------------------|-----------------------------------|---------------------------|----------------------------------|-------------------------------|---------------------------------|

Product Usage Information

Application

Western Blotting

Dilution

1:1000

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.

Specificity/Sensitivity

Perforin Antibody 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.

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 lysosome-like granules containing perforin, a membrane pore-forming protein. Granzyme B has the strongest apoptotic activity of all the granzymes 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 facilitates the entry of cytotoxic serine proteases, such as granzymes, into target cells (4). Perforin is primarily expressed in cytotoxic T lymphocytes and NK cells.

Background References

1. Trapani, J.A. (2001) *Genome Biol.* 2, REVIEWS 3014.
2. Lord, S.J. et al. (2003) *Immunol. Rev.* 193, 31-8.
3. Trapani, J.A. and Sutton, V.R. (2003) *Curr. Opin. Immunol.* 15, 533-43.
4. Catalfamo, M. and Henkart, P.A. (2003) *Curr. Opin. Immunol.* 15, 522-7.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary 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 Blotting

Cross-Reactivity Key

M: Mouse

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