

**#4275** Store at **-20°C**

# Granzyme B Antibody



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

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, E-P Endogenous	H, M	30-37 kDa	Rabbit**

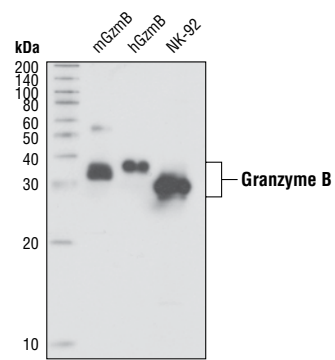
**Background:** Granzymes are a family of serine proteases expressed by cytotoxic T lymphocytes and natural killer (NK) cells and are key components of immune responses to pathogens and transformed cells (1). Granzymes are synthesized as zymogens and are processed into mature enzymes by cleavage of a 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 granzymes as a result of its caspase-like ability to cleave substrates at aspartic residues thereby activating procaspases directly and cleaving downstream caspase substrates (2,3).

**Specificity/Sensitivity:** Granzyme B Antibody detects endogenous levels of total Granzyme B protein.

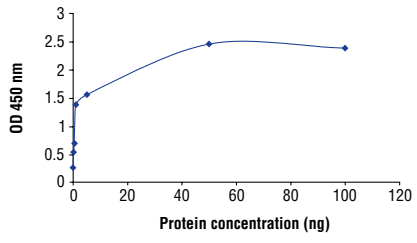
**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to a central region of Granzyme B. Antibodies were purified by protein A and peptide affinity chromatography.

**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.



Western blot analysis of recombinant mouse and human Granzyme B (5 ng) and extracts from the natural killer cell line NK-92, using Granzyme B Antibody.



ELISA analysis of recombinant human Granzyme B, using Granzyme B Antibody.

**Entrez-Gene ID** #3002  
**Swiss-Prot Acc.** #P10144

**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.

**\*Species cross-reactivity is determined by western blot.**  
**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

**Recommended Antibody Dilutions:**

Western blotting 1:1000  
 ELISA-Peptide 1:100

**For product specific protocols and a complete listing of recommended companion products please see the product web page at [www.cellsignal.com](http://www.cellsignal.com)**

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

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**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.