

PRODUCT INFORMATION

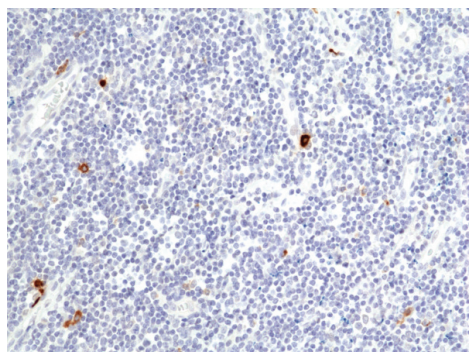


Granzyme B (C-Term) Rabbit Monoclonal Antibody (Clone RM441) Item No. 35806

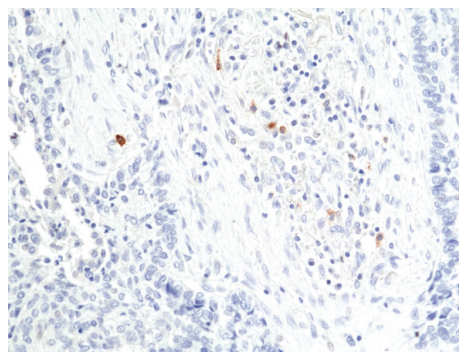
Overview and Properties

Contents:	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	CTLA-1, Cytotoxic Serine Protease B, Cytotoxic T-lymphocyte Proteinase 2, Fragmentin-2, Granzyme-2, GrB, GZMB
Immunogen:	Peptide from the C-terminal region of granzyme B
Cross Reactivity:	(+) Granzyme B
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM441
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC); the recommended starting dilution is 1:100-1:400. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Images



Immunohistochemical staining of formalin-fixed and paraffin-embedded human tonsil tissue using Granzyme B (C-Term) Rabbit Monoclonal Antibody (Clone RM441) at a 1:200 dilution.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human lung squamous carcinoma tissue using Granzyme B (C-Term) Rabbit Monoclonal Antibody (Clone RM441) at a 1:200 dilution.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Granzyme B is a serine protease that is involved in cytotoxic T lymphocyte- and natural killer cell-induced cell death.^{1,2} It localizes to cytoplasmic granules prior to release into the immunological synapse formed with a target cell.^{1,3} Granzyme B cleaves its substrates after an aspartate residue and targets caspase-3, caspase-8, and gasdermin E (GSDME), among others.^{1,2} It is involved in caspase-dependent and -independent apoptosis, necrosis, DNA fragmentation, pyroptosis, viral infection, and antitumor immunity.^{1,2,4} Knockout of the gene encoding granzyme B, *GZMB*, reduces disease severity in a mouse model of epidermolysis bullosa acquisita, an autoimmune disease characterized by blistering of the skin.⁵ Serum and synovial levels of granzyme B are elevated in patients with rheumatoid arthritis.⁶ Cayman's Granzyme B (C-Term) Rabbit Monoclonal Antibody (Clone RM441) can be used for immunohistochemistry (IHC).

References

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2. Tsuchiya, K. Switching from apoptosis to pyroptosis: Gasdermin-elicited inflammation and antitumor immunity. *Int. J. Mol. Sci.* **22(1)**, 426 (2021).
3. Pinkoski, M.J., Hobman, M., Heibein, J.A., *et al.* Entry and trafficking of granzyme B in target cells during granzyme B-perforin-mediated apoptosis. *Blood* **92(3)**, 1044-1054 (1998).
4. Trapani, J.A. and Sutton, V.R. Granzyme B: Pro-apoptotic, antiviral and antitumor functions. *Curr. Opin. Immunol.* **15(5)**, 533-543 (2003).
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