

Datasheet for ABIN2665016
anti-GZMB antibody



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1 Image

Overview

Quantity:	100 µg
Target:	GZMB
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This GZMB antibody is un-conjugated
Application:	Biochemical Assay (BCA)

Product Details

Clone:	12F9B65
Isotype:	IgG2a kappa
Purification:	The antibody was purified by affinity chromatography.

Target Details

Target:	GZMB
Alternative Name:	Granzyme B (GZMB Products)
Background:	Granzyme B is a serine protease expressed by cytotoxic T cells (CTL) and NK cells. Its main function is to induce cell death to eliminate harmful targets such as allogeneic, virally infected, and tumor cells. This is evident by the fact that CTLs from mice deficient of granzyme B exhibit a profound defect in inducing rapid DNA fragmentation and apoptosis in target cells. Following receptor-mediated conjugate formation between CTL or NK and their target cell, granzyme B

Target Details

enters the target via endocytosis, and subsequently activates multiple protein substrates to induce apoptosis. Most circulating CD56+ and CD8- NK cells, and approximately half of circulating CD8+ T cells, coexpress both granzyme A and B. In contrast, few circulating CD4+ T cells express granzymes A or B. Activation of CD8+ and CD4+ T cells induces substantial expression of granzyme B, but not granzyme A. Besides CTL and NK, evidence has shown that the distribution of human granzyme B has a broader spectrum of cells including CD34+ hematopoietic progenitor cells, keratinocytes, basophils, mast cells, plasmacytoid dendritic cells, and B cells. Although its role in cytotoxic lymphocyte-mediated apoptosis is well established, granzyme B can also degrade extracellular matrix proteins and alter inflammation, if present in the extracellular milieu. These findings suggest that granzyme B can function as an activation molecule with potentially important immunoregulatory functions. In addition, it was shown that expression of granzyme B is elevated in acute coronary syndrome and acute myocardial infarction, indicating that granzyme B could be a factor involved in cardiovascular diseases.

Pathways: [Apoptosis, Caspase Cascade in Apoptosis](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

Concentration: 0.5 mg/mL

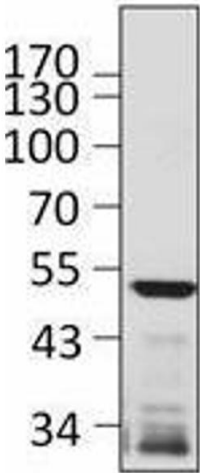
Buffer: Phosphate-buffered solution, pH 7.2, containing 0.09 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C

Storage Comment: The antibody solution should be stored undiluted between 2°C and 8°C.



Western Blotting

Image 1.