Datasheet for ABIN5692783

anti-GZMB antibody (AA 21-247)

1 Image

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Overview

Quantity:	100 µg
Target:	GZMB
Binding Specificity:	AA 21-247
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GZMB antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Anti-Granzyme B/Gzmb Antibody Picoband®
Immunogen:	E. coli-derived mouse Granzyme B recombinant protein (Position: I21-S247).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Granzyme B/Gzmb Antibody Picoband® (ABIN5692783). Tested in ELISA, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Target Details

Target:	GZMB
Alternative Name:	Gzmb (GZMB Products)
Background:	Synonyms: Granzyme B (G,H), CTLA-1, Cytotoxic cell protease 1, CCP1, Fragmentin-2, Gzmb, Ctla-1, Ctla1 Tissue Specificity: Isoform A is expressed in fetal liver and in hematopoietic tissues and choroid plexus. In adults highest expression in heart, liver, small intestine, prostate and ovary. Low level in lung and kidney. Isoform B is highly expressed in hypothalamus. Background: Granzyme B is a serine protease that in humans is encoded by the GZMB gene. Granzyme B is expressed by cytotoxic T lymphocytes (CTL) and natural killer (NK) cells. CTL and NK cells share the remarkable ability to recognize specific infected target cells. They are thought to protect their host by inducing apoptosis of cells that bear on their surface 'nonself' antigens, usually peptides or proteins resulting from infection by intracellular pathogens. The protein encoded by this gene is crucial for the rapid induction of target cell apoptosis by CTL in cell-mediated immune response.
Molecular Weight:	28 kDa
Gene ID:	14939
UniProt:	P04187
Pathways:	Apoptosis, Caspase Cascade in Apoptosis

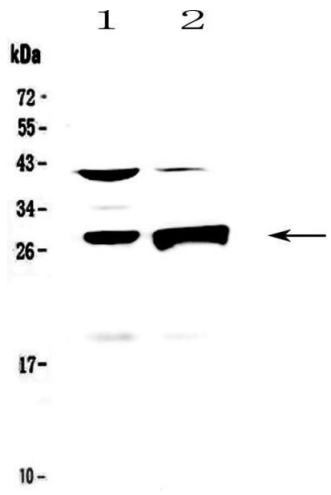
Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL ELISA, 0.1-0.5 µg/mL 1. Huang, C., Bi, E., Hu. Y., Deng, W., Tian, Z., Dong, C., Hu, Y., Sun, B.A novel NF-kappa-B binding site controls human granzyme B gene transcription.J. Immun. 176: 4173-4181, 2006. 2. Motyka, B., Korbutt, G., Pinkoski, M. J., Heibein, J. A., Caputo, A., Hobman, M., Barry, M., Shostak, I., Sawchuk, T., Holmes, C. F. B., Gauldie, J., Bleackley, R. C.Mannose 6-phosphate/insulin-like growth factor II receptor is a death receptor for granzyme B during cytotoxic T cell-induced apoptosis.Cell 103: 491-500, 2000. 3. Winrow, C. J., Pankratz, D. G., Vibat, C. R. T., Bowen, T. J., Callahan, M. A., Warren, A. J., Hilbush, B. S., Wynshaw-Boris, A., Hasel, K. W., Weaver, Z., Lockhart, D. J., Barlow, C.Aberrant recombination involving the granzyme locus occurs in Atm-/- T-cell lymphomas.Hum. Molec. Genet. 14: 2671-2684, 2005.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na_2HPO_4, 0.05 mg NaN_3.
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,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of Granzyme B using anti-Granzyme B antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse thymus tissue lysates, Lane 2: mouse liver tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Granzyme B antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Granzyme B at

approximately 28KD. The expected band size for Granzyme B is at 28KD.