Human Granzyme A PE-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 356412

Catalog Number: IC29051P

100 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Granzyme A in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human Granzyme B, C, D, G, or H is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 356412
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Granzyme A Cys26-Val262 Accession # P12544
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

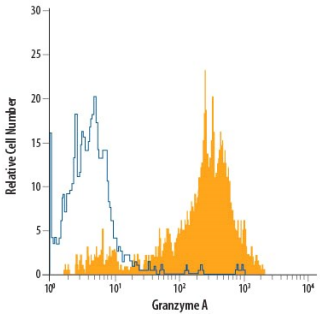
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Intracellular Staining by Flow Cytometry



Detection of Granzyme A in $CD56^+$ Human Blood Cells by Flow Cytometry. $CD56^+$ human whole blood cells were stained with Mouse Anti-Human Granzyme A PE-conjugated Monoclonal Antibody (Catalog # IC29051P, filled histogram) or isotype control antibody (Catalog # IC0041P, open histogram). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Granzyme A is a member of the granzyme family of the serine proteases found specifically in the cytotoxic granules of cytotoxic T lymphocytes (CTL) and natural killer (NK) cells. Granzyme A is the most abundant protease in CTL and NK cells. It induces caspase–independent cell death when introduced into target cells by perforin (1). Human granzyme A is synthesized as a precursor (262 residues) with a signal peptide (residues 1–26), a propeptide (residues 27–28) and a mature chain (residues 29–262) (2). The purified recombinant human Granzyme A consists of residues 26 to 262. After being activated by lysyl endopeptidase, it cleaves a thioester substrate.

References:

1. Lieberman, J. and Z. Fan (2003) Curr. Opin. Immunol. **15**:553.
2. Gershenfeld, H.K. *et al.* (1988) Proc. Natl. Acad. Sci. USA **85**:1184.

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