

DESCRIPTION

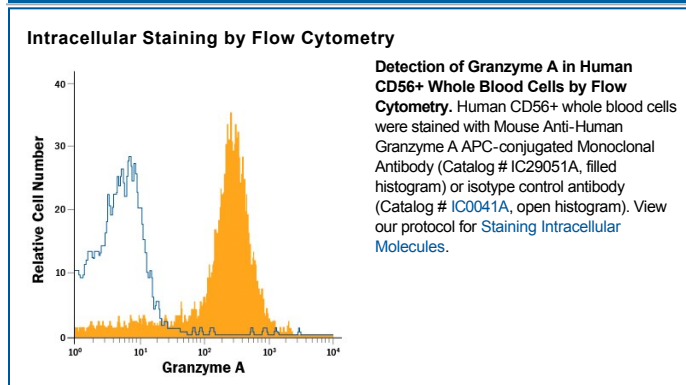
Species Reactivity	Human
Specificity	Detects human Granzyme A in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human Granzyme B, C, D, G, or H is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 356412
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Granzyme A Cys26-Val262 Accession # P12544
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 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 μ L/10 ⁶ cells	See Below

DATA



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.