

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human Granzyme K in direct ELISAs. |
| Source | Recombinant Monoclonal Rabbit IgG Clone # 2471A |
| Purification | Protein A or G purified from cell culture supernatant |
| Immunogen | Synthetic peptide containing human Granzyme K Accession # P49863 |
| Conjugate | Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm |
| Formulation | Supplied 0.2 mg/mL 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.

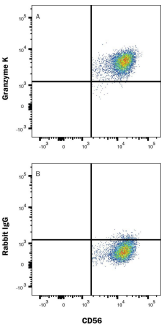
APPLICATIONS

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.

Intracellular Staining by Flow Cytometry Titration recommended for optimal concentration with starting range of 0.1-1 µg/1 million cells. Sample used for this experiment were day 10 expanded NK cells.

DATA

Intracellular Staining by Flow Cytometry



Detection of Granzyme K by Flow Cytometry. NK cells treated with Recombinant Human IL-2 Protein (Catalog # 202-IL), Recombinant Human IL-12 Protein (Catalog # 219-IL), Recombinant Human IL-18/IL-1F4 Protein (Catalog # 9124-IL) and Recombinant Human IL-21 Protein (Catalog # 8879-IL) for 10 days were stained with Rabbit Anti-Human NCAM-1/CD56 Alexa Fluor® 647-conjugated Monoclonal Antibody (Catalog # FAB24086R) and either (A) Rabbit Anti-Human Granzyme K Alexa Fluor® 594-conjugated Monoclonal Antibody (Catalog # IC10216T) or (B) Normal Rabbit IgG Control (Catalog # AB-105-C). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012). View our protocol for [Staining Intracellular Molecules](#).

PREPARATION AND STORAGE

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| 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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied. |

BACKGROUND

Granzymes are released by cytoplasmic granules within NK and cytotoxic T cells. They are serine proteases that induce apoptosis in the target cell. Granzymes have also been found to help initiate the inflammatory response by activating macrophages and mast cells when in an extracellular state. Granzymes have also been found to protect the body against the formation of different kinds of lymphomas.

References:

1. Bots, M. and JP Medema (2006). J.Cell Sci. **119**:5011.
2. Walch, M. *et al.* (2014). Cell. **157**:1309.
3. Cullen, SP. *et al.* (2010). Cell Death Differ. **17**:616.

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