Human Granzyme K Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2471A
Catalog Number: MAB10216

DESCRIPTION

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
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

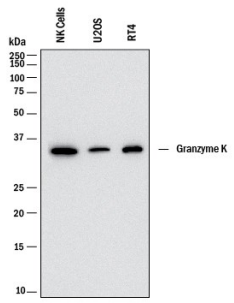
APPLICATIONS

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
Western Blot	0.1 µg/mL	See Below
Flow Cytometry	25 µg/mL	Human peripheral blood mononuclear cells (PBMCs)
Immunohistochemistry	5-25 µg/mL	See Below

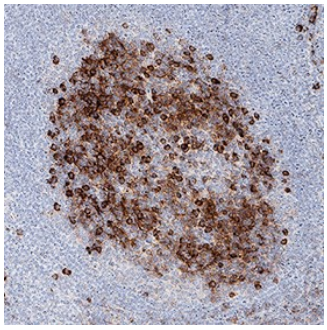
DATA

Western Blot



Detection of Human Granzyme K by Western Blot. Western blot shows lysates of human NK cells, U2OS human osteosarcoma cell line, and RT-4 human bladder carcinoma cell line. PVDF membrane was probed with 0.1 µg/mL of Rabbit Anti-Human Granzyme K Monoclonal Antibody (Catalog # MAB10216) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Granzyme K at approximately 30 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



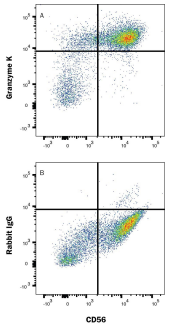
Granzyme K in Human Tonsil. Granzyme K was detected in immersion fixed paraffin-embedded sections of human tonsil using Rabbit Anti-Human Granzyme K Monoclonal Antibody (Catalog # MAB10216) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm in lymphocytes. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Human Granzyme K Antibody

Recombinant Monoclonal Rabbit IgG Clone # 2471A
Catalog Number: MAB10216

Flow Cytometry



Detection of Granzyme K in expanded Human NK cells by Flow Cytometry. Detection of Granzyme K in expanded Human NK cells by Flow Cytometry. NK cells were expanded from Human peripheral blood mononuclear cells (PBMCs) for 14 days using ExCellerate™ Human NK Cell Expansion Media (Catalog # CCM032). NK cells were stained with (A) Mouse Anti-Human Granzyme K Monoclonal Antibody (Catalog # MAB10216), followed by PE-conjugated anti-Rabbit IgG secondary antibody (Catalog # F0110) and Rabbit Anti-Human CD56 Alexa Fluor® 647-conjugated Monoclonal Antibody (Catalog # FAB24086R). (B) Quadrant markers were set based on control antibody staining (Catalog # MAB1050). 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

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449