

30-2530: Anti-Granzyme B FITC (Clone : CLB-GB11)

Clonality :	Monoclonal
Clone Name :	CLB-GB11
Application :	FACS
Reactivity :	Human
Conjugate :	FITC
Gene :	GZMB
Gene ID :	3002
Alternative Name :	GZMB, HLP, CTLA1, SECT, granzyme B
Isotype :	Mouse IgG1
Immunogen Information :	Human NK cell line YT-INDY-derived granzyme B

Description

Granzyme B is a serine protease that is expressed in cytoplasmic granules of cytotoxic T lymphocytes and NK cells. Vectorial secretion of perforin and granzymes is responsible for their granule-mediated cytotoxicity. Granzyme B plays a pivotal role in the induction of apoptosis in the target cells by activation of caspases. Moreover, granzyme B was reported to cleave directly alpha-tubulin, leading to perturbation of microtubule networks during the induced cell death.

Specificity : The mouse monoclonal antibody CLB-GB11 recognizes granzyme B, a 31 kDa serine protease expressed intracellularly in activated Tc cells and NK cells.

Product Info

Amount :	100 tests
Purification :	The purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Content :	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
Storage condition :	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 μ l reagent / 100 μ l of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

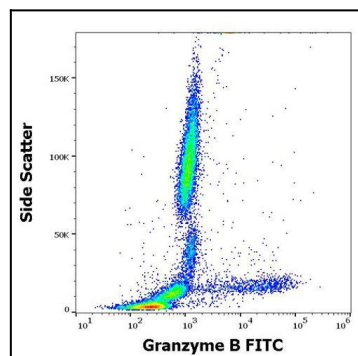


Figure 1 : Flow cytometry intracellular staining pattern of human peripheral whole blood stained using anti-human Granzyme B (CLB-GB11) FITC antibody (4 μ l reagent / 100 μ l of peripheral whole blood).

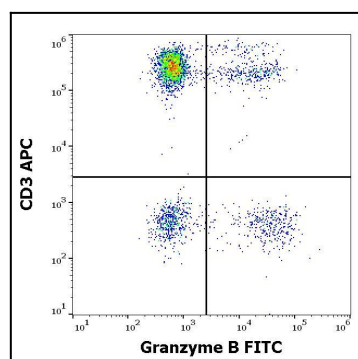


Figure 2 : Flow cytometry multicolor intracellular staining of human lymphocytes stained using anti-human Granzyme B (CLB-GB11) FITC antibody (4 μ l reagent / 100 μ l of peripheral whole blood) and anti-human CD3 (UCHT1) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).

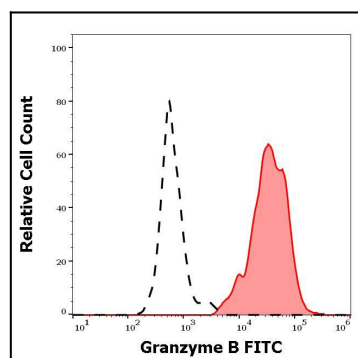


Figure 3 : Separation of human CD3 negative Granzyme B positive lymphocytes (red-filled) from CD3 negative Granzyme B negative lymphocytes (black-dashed) in flow cytometry analysis (intracellular staining) of human peripheral whole blood stained using anti-human Granzyme B (CLB-GB11) FITC antibody (4 μ l reagent / 100 μ l of peripheral whole blood).