

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

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	CLB-GB11
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	FITC
<b>Gene :</b>	GZMB
<b>Gene ID :</b>	3002
<b>Alternative Name :</b>	GZMB, HLP, CTLA1, SECT, granzyme B
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	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

<b>Amount :</b>	100 tests
<b>Purification :</b>	The purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
<b>Content :</b>	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
<b>Storage condition :</b>	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  $\mu$ l reagent / 100  $\mu$ l of whole blood or  $10^6$  cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

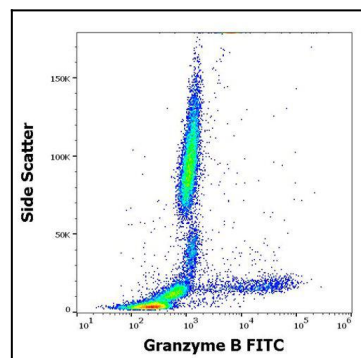


Figure 1 : Flow cytometry intracellular staining pattern of human peripheral whole blood stained using anti-human Granzyme B (CLB-GB11) FITC antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

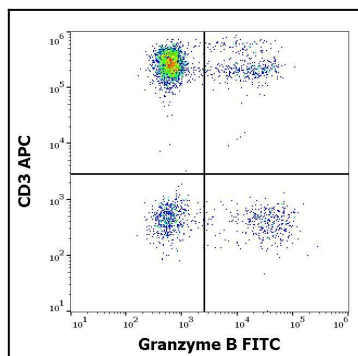


Figure 2 : Flow cytometry multicolor intracellular staining of human lymphocytes stained using anti-human Granzyme B (CLB-GB11) FITC antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CD3 (UCHT1) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

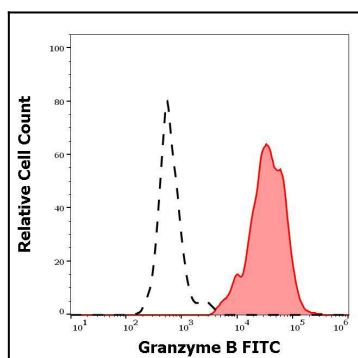


Figure 3 : Separation of human CD3 negative Granzyme B positive lymphocytes (red-filled) from CD3 negative Granzyme B negative lymphocytes (black-dashed) in flow cytometry analysis (intracellular staining) of human peripheral whole blood stained using anti-human Granzyme B (CLB-GB11) FITC antibody (4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