

Product datasheet for DM1209

OriGene Technologies, Inc.

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Granzyme K (GZMK) Mouse Monoclonal Antibody [Clone ID: GM24C3]

Product data:

Product Type: Primary Antibodies

Clone Name: GM24C3
Applications: ELISA, FC

Recommended Dilution: Flow Cytometry: $1.2 \mu g/106$ cells.

ELISA: 1/200-1/400.

Cell based ELISA with intakt, transiently transfected cells: 1/200-1/400.

Reactivity: Human
Host: Mouse
Isotype: IgG2b

Clonality: Monoclonal

Immunogen: GM24C3 was generated by genetic immunisation of BALB/c mice with an immunisation vector

containing the Granzyme K cDNA

Specificity: This antibody recognizes Granzyme K (GZMK).

Formulation: PBS, pH 7.2 without preservatives

State: Purified

State: Liquid purified IgG fraction.

Concentration: lot specific

Purification: Affinity Chromatography on Protein G

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: granzyme K

Database Link: Entrez Gene 3003 Human

P49863





Background: Granzyme K (GrK) belongs to a family of trypsin-like serine proteases localised in the cytotoxic

granules of activated T cells and NK cells. It encodes a 28 kDa serine protease whose gene is located on chromosome 5q11-12 close to the granzyme A-encoding gene. Like granzyme A, it has a trypsin-like specifity cleaving at the basic residues arginine and lysine. Granzyme K triggers rapid cell death independently of caspase activation with single-stranded DNA nicks

and is primarily expressed in thymus, lung, spleen and peripheral blood leukocytes.

Synonyms: Granzyme-3, NK-tryptase-2, Fragmentin-3, TRYP2, NK-Tryp-2

Note: Selection: based on recognition of the complete native protein expressed on transfected

mammalian cells.

Product images:

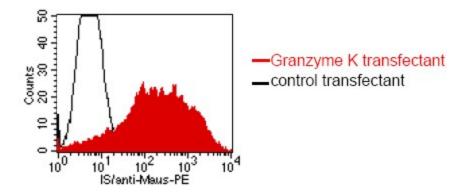


Fig. 1: FACS analysis of BOSC23 cells using GM-24C3. BOSC23 cells were transiently transfected with anexpression vector encoding either Granzyme K (red curve) oran irrelevant protein (control transfectant: black curve). Binding of GM-24C3 was detected with a PE-conjugatedsecondary antibody. A positive signal was obtained only with Granzyme K transfected cells.

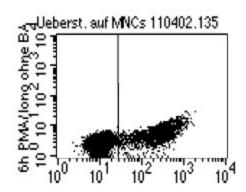


Fig. 2: Intracellular detection of granzyme B in human PBMC.FACS analysis of human PBMC using hybridoma supernatantof GM-24C3. PBMC were cultivated in the presence ofphorbolester and ionomycin subsequently fixed andpermeabilised. Binding of GM-24C3 was detected with aFITC-conjugated secondary antibody.



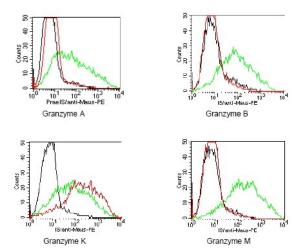


Fig3: BOSC cells were transiently transfected with expression vectors for Granzyme A, B, K, or M. Expression of the constructs was tested with an anti-myc monoclonal antibody (green curves), an irrelevant monoclonal antibody served as negative control (black curves). For specificity testing, GM-24C3 hybridoma supernatant was tested on all transfectants. A positive signal was obtained only with Granzyme K transfected cells (red curves).