



## Anti-Human Calgranulin B Monoclonal Antibody

Catalogue#	Format	Size	Concentration	Isotype Control
<b>CL2712A</b>	Ascites	0.5 ml	N/A	CLCMG100
<b>CL2712AP</b>	Purified	200 µg	1.0 mg/ml	CLCMG100
<b>CL2712B</b>	Biotin	100 µg	0.1 mg/ml	CLCMG115
<b>CL2712F</b>	FITC	100 µg	0.1 mg/ml	CLCMG101
<b>CL2712PE</b>	PE	50 µg	0.1 mg/ml	CLCMG104

Isotype: Mouse IgG1

### DESCRIPTION:

Anti-Human Calgranulin B monoclonal antibody reacts with the human Calgranulin B protein. Calgranulin B, also known as MRP-14 and S100A9 is a member of the S100 family of proteins containing 2 EF hand (alpha helix, turn, alpha helix structure) calcium binding motifs. S100 proteins are localized in the cytoplasm and /or nucleus of a wide range of cells and are involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation.

MRP-14 (S100A9) forms a heterodimeric complex with MRP-8 (S100A8) in the cytosol of monocyte and neutrophil cell types circulating in peripheral blood. Calgranulin B is found in elevated levels in the serum of cystic fibrosis cases and is also expressed in the skin of patients with psoriasis, eczematous dermatitis and squamous cell carcinoma. Calgranulin B is also expressed on macrophages in acute inflamed tissues (peridontitis, contact excema). We also sell an ascites purified anti-human Calgranulin B monoclonal antibody, CL2712AP, as well as its respective Biotin, FITC and PE conjugates.

Reported applications of this antibody include flow cytometry, IF, IHC and Western blots.

### PRESENTATION:

**Ascites:** From ascitic fluid.

**Purified:** Purified IgG buffered in PBS and 0.02% NaN<sub>3</sub>. (Purified from ascitic fluid via Protein G Chromatography).

**Biotin, FITC, PE:** Biotin/FITC/PE conjugated IgG buffered in PBS, 0.02% NaN<sub>3</sub> and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/mL. **Do not freeze PE conjugates.**

**STORAGE/STABILITY:**

For all formats, store at 4°C. For long term storage (Ascites, Purified, Biotin, FITC), aliquot and freeze unused portion at -20°C in volumes appropriate for single usage. Avoid freeze/thaw cycles. Do not freeze PE conjugates.

**SPECIFICATIONS:**

Clone: CF-557

Hybridoma Production:

Immunization:

Immunogen: Purified granulocyte antigen of human origin

Donor: human leukocytes

Antigen: Calgranulin B

Fusion Partner: NSO Mouse Myeloma Partner

Specificity: Binds to human Calgranulin B

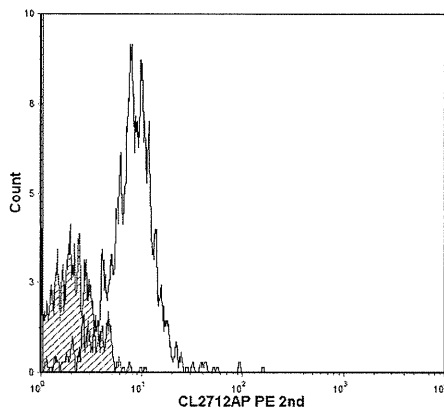
**TEST RESULTS:**

Tissue Distribution by Flow Cytometry Analysis:

Cell Concentration:  $1 \times 10^6$  cells per tests

Antibody Concentration Used:  $2.0 \mu\text{g}/10^6$  cells

Isotypic Control (shaded): Purified Mouse IgG1 (CLCMG100)



Cell Source: Human Peripheral Blood Leukocytes labeled with CL2712AP and PE Secondary Ab  
Percentage of cells stained above control: 74.7%

**N.B.** Appropriate control samples should always be included in any labeling studies.  
\* For optimal results in various applications, it is recommended that each investigator determine dilutions appropriate for individual use.

**REFERENCES:**

1. Klein et al. 1996. Identification and Functional Separation of Retinoic Acid Receptor Neutral Antagonists and Inverse Agonists. The Journal of Biological Chemistry Sept; 271(37):22692-22696.
2. Nagpal et al. 1996. Negative Regulation of Two Hyperproliferative Keratinocyte Differentiation Markers by a Retinoic Acid Receptor-specific Retinoid: Insight into the Mechanism of Retinoid Action in Psoriasis. Cell Growth and Differentiation Dec; 7:1783-1791.
3. Thacher et al. 1999. Cell Type and Gene-specific Activity of the Retinoid Inverse Agonist AGN 193109: Divergent Effects from Agonist at Retinoic Acid Receptor  $\gamma$  in Human Keratinocytes. Cell Growth and Differentiation Apr; 10:255-262.

**FOR RESEARCH USE ONLY**