

CASY^{VIVO} Cell Counter & Analyzer - Powering Breakthroughs in Cell Research

Standardizing the Count for Accurate Migration Analysis

Körner et al. (2019). SNS controls resolution of inflammation via RGM-A; Nature Communications, 10:633. DOI: 10.1038/s41467-019-08567-x.

Immunology; Macrophages; Neutrophils; Normalization	
Index	IM13
Standardization	X
Counting	X
Viability	
Volume	X

The Challenge:

To accurately model neutrophil and macrophage movement, researchers needed a way to eliminate variability in cell density, which can skew chemotaxis results.

CASY's Contribution:

CASY addressed this by delivering **gold-standard cell quantification**. This precision allowed for the normalization of leukocyte responses within microfluidic chambers, transforming raw movement into reliable kinetic data. Without CASY's accurate counting, the integration of real-time behavior and advanced experimental control would not be reproducible.

Key Benefits to Researchers:

- **Precise Cell Counting & Sizing:** Obtain accurate cell number and size measurements, crucial for analyzing nuanced leukocyte responses.
- **Versatility for Diverse Cell Types:** Effectively analyze various immune cells, including neutrophils and macrophages, broadening research applicability.
- **Reliable Normalization & Standardization for Complex Setups:** Seamlessly integrate into advanced experimental environments like microfluidic chambers, demonstrating robust performance.

CASY's Precise Assessment of Neutrophil and Macrophage Enables Reliable Normalization & Standardization Chemotaxis in Microfluidic Chambers Experiments

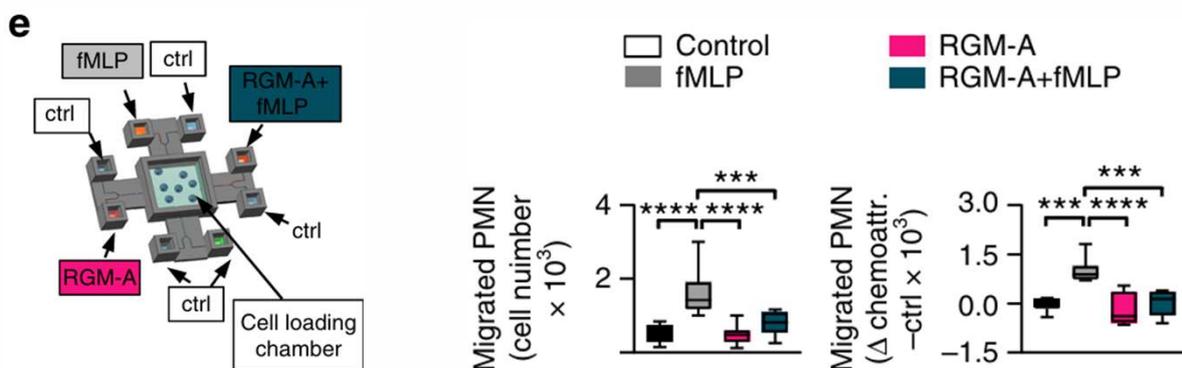


Fig. 1: RGM-A controls macrophage phenotype and regulates human PMN (polymorphonuclear cells)/macrophage chemotaxis and chemokinesis. e Schematic model of the microfluidic migration chamber. PMN and M1 MΦ chemotaxis were evaluated using a CASY cell counter (n=18)