

Vol. 132 (July–December 2021)



Phagocytosis of apoptotic cancer cells with dendritic cells is an important event for cancer immunology and immunotherapy. So far, phagocytosis has been investigated by flow cytometric analysis of the mixture of fluorescence-stained cancer and dendritic cells. However, there is limited information that can be obtained by quantifying fluorescence intensity. Satoshi Yamaguchi and Akimitsu Okamoto in The University of Tokyo made a single-cell array of the phagocytosis mixture including red-stained dendritic cells, green-stained apoptotic cancer cells and cancer-phagocytizing dendritic cells. This image shows a part of the array and gives information about the ratio of cell pairs in various phagocytic states such as phagocytosis-starting pairs, partially phagocytizing ones and fully phagocytizing ones. This method allows for accurate evaluation of phagocytosis efficiency and reliable isolation of vaccinated dendritic cells.

This image was taken by Satoshi Yamaguchi in Okamoto group, Research Center for Advanced Science and Technology, The University of Tokyo (<http://park.itc.u-tokyo.ac.jp/okamoto/>) (Copyright@2021 The Society for Biotechnology, Japan).

⇒ [JBB Archive](#)