Cell Destruction Method to Eliminate/Remove Unwanted Subpopulations of Cells

Tech ID: 22543 / UC Case 2011-667-0

BRIEF DESCRIPTION

Researchers at the University of California, Irvine have developed a novel method and device for cell separation that does not require cell labeling.

FULL DESCRIPTION

Fluorescence activated cell sorting (FACS) is an important technique that has become the standard method to isolate subpopulations of cells.However, FACS has limited use in cases where the cells of interest do not have specific cell surface markers (e.g., isolating neuronal progenitors or astrocytic progenitors from neural stem or progenitor cells).New methods that allow for separation of cells that do not require advanced cell labeling would be an important tool for researchers.

Researchers at the University of California, Irvine have developed a novel method and device for cell separation that does not require cell labeling.The method would enable researchers to enrich a subpopulation of cells by destroying another subpopulation of cells without using a specific cell surface marker.Furthermore, the method allows up to 10 million cells to be processed at one time and would be applicable to any cell mixture, including those that contain stem cells or cancer cells.

SUGGESTED USES

The method may be used for applications including, but not limited to, facilitation of the discovery of cell surface markers for any stem cells, enrichment of specific cell types for animal transplantation studies or cell-based therapeutics, and removal of undesired cell types (such as cells that may cause tumors) for cell-based therapeutics.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,797,862	10/24/2017	2011-667

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OTHER INFORMATION

KEYWORDS

cell, cell sorting, cell destruction, cell enrichment, cell separation, cell surface markers

CATEGORIZED AS

- **Engineering**
  - Engineering
- **Medical**
  - Devices
  - Disease: Cancer
  - Other
  - Research Tools
  - Stem Cell
- **Research Tools**
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