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(57) Abstract: A method for enriching glucagon producing alpha cells and/or insulin producing beta cells in a mixture of cells, comprising labelling the cell surface marker CD99R in a starting mixture of cells with a label and separating the cells that are positive for the cell surface marker from cells that are negative for the cell surface marker to obtain a final mixture of cells that is more enriched in alpha cells and/or beta cells compared to the starting mixture. A use of an antibody specific for CD99R for detecting glucagon producing alpha cells and/or insulin producing beta cells.

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