Claims

Claim 1

A method for obtaining monocytes or NK cells, comprising:

(a) collecting a monocyte sample by separating the monocytes from peripheral blood by using an antibody specific for a surface marker of the monocytes;

(b) collecting, as an NK cell sample, cell populations remaining after the separation of the monocytes; and

(c) growing the monocytes or the NK cells by culturing at least one of the monocyte sample and the NK cell sample.

Claim 2

The method as set forth in claim 1, wherein in the step (c), the monocytes are grown by culturing the monocyte sample by use of a first medium containing Flt-3L.

Claim 3

The method as set forth in claim 2, further comprising:

(d) differentiating the monocytes into dendritic cells while growing the monocytes by adding a stimulating factor for the monocytes to the first medium.

Claim 4

The method as set forth in claim 1, wherein in the step (c), the NK cells are grown by culturing the NK cell sample by use of a second medium containing an anti-CD56 antibody or IFN-γ.

Claim 5

The method as set forth in claim 2 or 3, wherein in the step (c), the NK cells are further grown by culturing the NK cell sample by use of a second medium containing an anti-CD56 antibody or IFN-γ.

Claim 6

The method as set forth in claim 4 or 5, wherein the second medium contains the anti-CD56 antibody.

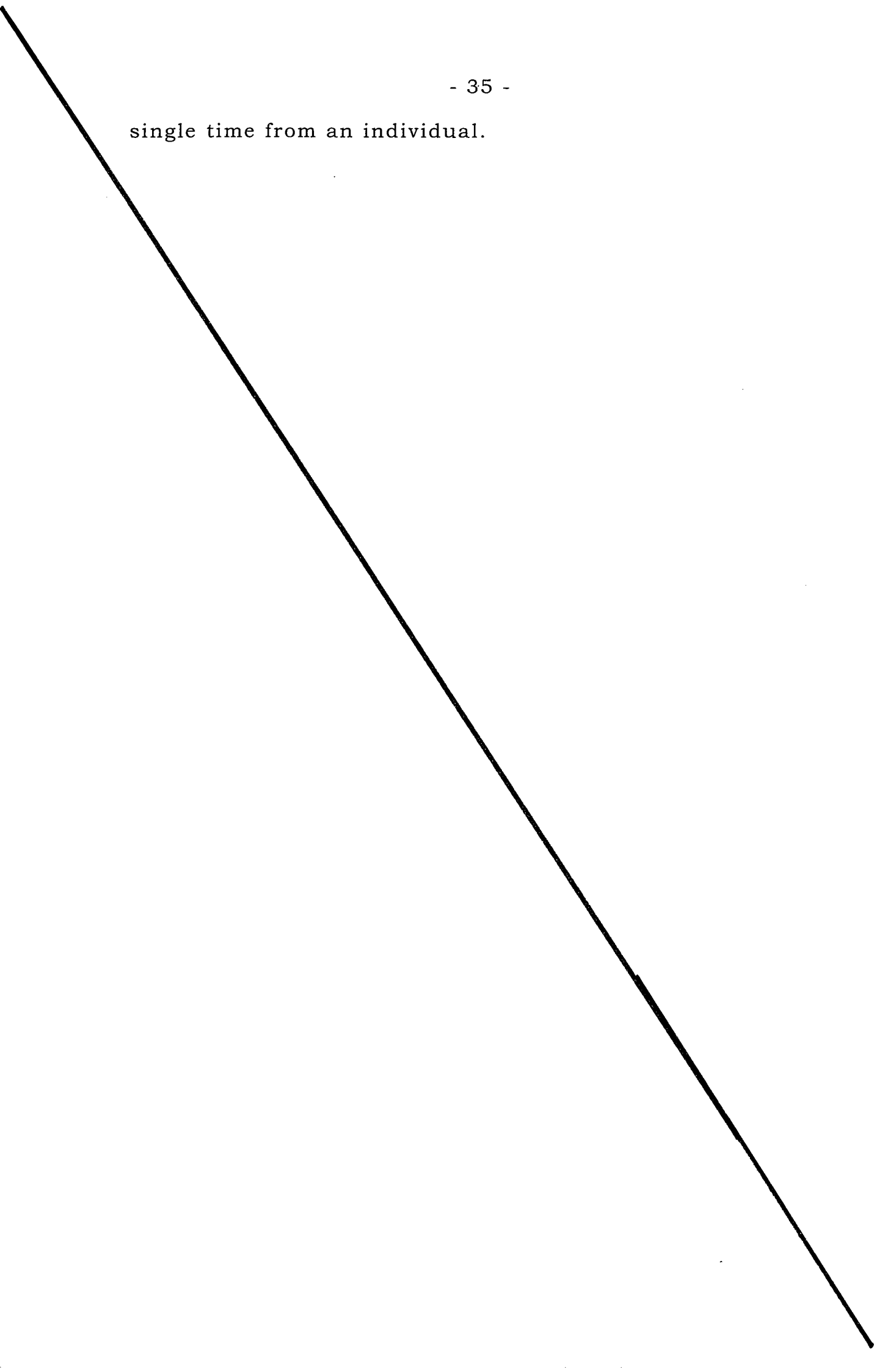
Claim 7

The method as set forth in any one of claims 4 through 6, wherein the second medium further contains IL-2, IL-12, and IL-15.

Claim 8

The method as set forth in any one of claims 1 through 7, wherein the peripheral blood is collected a

single time from an individual.



CLAIMS

1. A method for obtaining monocytes or NK cells, comprising:

collecting a monocyte sample by separating the monocytes from peripheral blood by using an antibody specific for a surface marker of the monocytes;

collecting, as an NK cell sample, cell populations remaining after the separation of the monocytes; and

growing the monocytes by culturing the monocyte sample by use of a first medium containing Flt-3L.

2. The method as set forth in claim 1, wherein the first medium further contains GM-CSF.

3. The method as set forth in claim 1 or 2, further comprising:

differentiating the monocytes into dendritic cells while growing the monocytes by adding a stimulating factor for the monocytes to the first medium.

4. A method for obtaining monocytes or NK cells, comprising:

collecting a monocyte sample by separating the monocytes from peripheral blood by using an antibody specific for a surface marker of the monocytes;

collecting, as an NK cell sample, cell populations remaining after the separation of the monocytes; and

growing the NK cells by culturing the NK cell sample by use of a second medium containing an anti-CD56 antibody or IFN-γ.

5. The method as set forth in any one of claims 1 through 3, further comprising growing the NK cells by culturing the NK cell sample by use of a second medium containing an anti-CD56 antibody or IFN-γ.

6. The method as set forth in claim 4 or 5, wherein the second medium contains the anti-CD56 antibody.

7. The method as set forth in any one of claims 4 through 6, wherein the second medium further contains IL-2, IL-12, and IL-15.

8. The method as set forth in any one of claims 1 through 7, wherein the peripheral blood is collected a single time from an individual.