What is claimed is:

1. A method for producing purified platelets from a culture of megakaryocytes, comprising:

removing megakaryocytes from the culture by centrifuging the culture in a first rotatable separation bowl at a centrifugal force of 150×g to 550×g to give a liquid component comprising platelets separated from the megakaryocytes; and

purifying the platelets in the liquid component by centrifuging the liquid component in a second rotatable separation bowl at a centrifugal force of 600×g to 4000×g.

2. The method according to claim 1, wherein:

the first rotatable separation comprises an outflow port through which a liquid component flows following separation; and

recovering the liquid component that has flowed out from the outflow port.

3. The method according to claim 2, which further comprises:

adding a wash solution to the second rotatable separation bowl

and then rotating the second rotatable separation bowl; and

adding a recovery solution and then rotating the second rotatable separation bowl.

4. The method according to claim 2 or 3, wherein the culture is injected into the first rotatable separation bowl by allowing the culture to drop therein by gravity.

5. The method according to any one of claims 1 to 4, which further comprises:

overexpressing c-Myc and BMI1 in cells less differentiated than megakaryocytes;

overexpressing a Bcl-xL gene in the cells; and

terminating all the overexpression.

6. A method for producing a blood preparation, which comprises mixing purified platelets produced using the method according to any one of claims 1 to 5, with another component.