[CLAIMS]

1. A method of preparing a cell population containing stem cells and/or progenitor cells positive for expression of Tie2 (tyrosine kinase with Ig and EGF homology domain-2) (hereinafter referred to as "Tie2-positive stem/progenitor cells"), the method comprising:

an amplification culture stage comprising:

a step of performing a method of culturing the cell population containing Tie2-positive stem/progenitor cells while present in a nucleus pulposus tissue of an intervertebral disc in a culture medium containing, as a Tie2 expression enhancer other than growth factors, an extract derived from a plant of the genus *Cinnamomum,* (hereinafter, the method is referred to as a "first-second culture method"), and

a step of recovering the post-culture cell population containing the Tie2-positive stem/progenitor cells derived from the nucleus pulposus tissue of the intervertebral disc.

2. The preparation method according to claim 1, wherein the nucleus pulposus tissue of an intervertebral disc is a tissue obtained by thawing a cryopreserved nucleus pulposus tissue of an intervertebral disc.

3. The preparation method according to claim 1 or 2, wherein the amplification culture stage further comprises a step of culturing the cell population containing the Tie2-positive stem/progenitor cells in a culture medium only containing, as a Tie2 expression enhancer, a growth factor having a Tie2 expression-enhancing effect selected from the group consisting of FGF (fibroblast growth factor), EGF (epidermal growth factor), and Ang-1 (Angiopoietin-1).

4. A method for preparing, from a cell population containing Tie2-positive stem/progenitor cells, a cell population containing target cells differentiated from the Tie2-positive stem/progenitor cells, the method comprising:

the amplification culture stage according to any one of claims 1 to 3; and

a differentiation culture stage for inducing differentiation from the Tie2-positive stem/progenitor cells into target cells,

wherein the differentiation culture stage comprises a step of performing a method of culturing the cell population containing the Tie2-positive stem/progenitor cells by using cultureware with a culture surface having undergone cell attachment-increasing treatment (hereinafter, the method is referred to as a “third culture method”).

5. The preparation method according to claim 4, wherein the cell attachment-increasing treatment in the differentiation culture stage is treatment of applying a coating agent containing an extracellular matrix and/or a polyamino acid, preferably, at least one or more kind selected from the group consisting of type IV collagen, fibronectin, and polylysine.

6. A method for preparing, from a cell population containing Tie2-positive stem/progenitor cells, a cell population containing target cells differentiated from the Tie2-positive stem/progenitor cells, the method comprising

the amplification culture stage according to any one of claims 1 to 3; and

a differentiation culture stage for inducing differentiation from the Tie2-positive stem/progenitor cells into target cells,

wherein the differentiation culture stage comprises a step of performing

a method of culturing the cell population containing Tie2-positive

stem/progenitor cells while suppressing formation of spheroid colonies in a culture medium containing an extracellular matrix-degrading agent (herein after, the method is referred to as “ fourth culture method").

7. The preparation method according to claim 6, wherein the extracellular matrix-degrading agent of the fourth culture method comprises at least a protease having activity to degrade type II collagen.

8. The preparation method according to any one of claims 4 to 7, wherein the target cells are cells expressing at least type II collagen, preferably, nucleus pulposus cells.

9. The preparation method according to any one of claims 4 to 8, wherein a cell population in which the Tie2-positive stem/progenitor cells remain is obtained through the differentiation culture stage.

10. A method of preparing a cell population, the method comprising:

an amplification culture stage; and

a differentiation culture stage to induce differentiation from the Tie2-positive stem/progenitor cells into the target cells after the amplification culture stage,

wherein the amplification culture stage comprises a step of performing the first-second culture method according to claim 1, and

wherein the differentiation culture stage comprises a step of performing both the third culture method according to claim 4 and the fourth culture method according to claim 6.

11. The cell population-preparing method according to claim 10, wherein the step of performing both the third culture method and the fourth culture method is a fused method.