【CLAIMS】

【Claim 1】

A method for preparing mesenchymal stem cell-derived exosomes, the method comprising: providing a cell sample of mesenchymal stem cells;

sub-culturing the cell sample in a low-glucose Dulbecco's Modified Eagle's Medium (DMEM) medium;

culturing the sub-cultured cells in a substrate medium containing cycloheximide, and then obtaining a cell culture solution; and

isolating exosomes from the cell culture solution,

wherein in the obtaining of the cell culture solution, the substrate medium further comprises TNFα, and

wherein the substrate medium has a TNFα : cycloheximide ratio of 1:20 to 1:2000.

【Claim 2】

The method of claim 1, wherein TNFα is comprised at a concentration of 5 to 500 ng/mL.

【Claim 3】

The method of claim 1, wherein a treatment time of the TNFα and cycloheximide is 30 to 100 hours.

【Claim 4】

The method of claim 1, wherein in the cell culture solution,

the number of exosomes and a content of any one or more of an exosome-derived protein and exosome-derived RNA are increased compared to a cell culture solution obtained by culturing the sub-cultured cells in a

substrate medium to which only TNFα or only cycloheximide is added.

【Claim 5】

The method of claim 1,

wherein the substrate medium has a TNFα : cycloheximide ratio of 1:100,

wherein a treatment time of the TNFα and cycloheximide is 48 to 96 hours, and

wherein 1.1 X 10^{11} or more exosomes per ml of the cell culture solution are isolated.

【Claim 6】

The method of claim 1, wherein in the sub-culturing of the cell sample,

the medium comprises one or more selected from the group consisting of EGF, FGF-2, GDF11, KGF, HGF, PDGF, VEGF, IGF, and TGF-b, and

the sub-culturing of the cell sample is performed for 4 to 10 passages.

【Claim 7】

The method of claim 1, wherein the isolated exosomes express one or more exosome markers selected from the group consisting of CD63, CD9, CD81, S1PR1, and S1PR3.

【Claim 8】

The method of claim 1, wherein

the mesenchymal stem cells are obtained from adipose tissue or placental tissue.