

[Abstract]

The present disclosure relates to vMSC, which is a stem cell that is newly identified and has angiogenic properties. vMSCs cultured under specific culture conditions and identified, according to the present disclosure, are novel MSCs that express a CD141 cell surface antigen, unlike conventional MSCs, and the vMSC has excellent cell expansion ability, has a direct angiogenic effect, and has an autocrine effect unlike conventional stem cells, as well as a paracrine effect by other MSCs. Thus, the vMSCs have a higher survival and retention rate in tissues than conventional stem cell therapeutic agents, and can be used as a stem cell therapeutic agent for blood vessel regeneration that directly forms blood vessels.