

ABSTRACT

An object of the present invention is to provide a ventral hindgut organoid for producing a bladder organoid that comprises a layer structure of bladder epithelial cell types like the urinary bladder. An aspect of the present invention is to provide a method for producing a ventral hindgut organoid, comprising culturing a pluripotent stem cell with an inducer medium A containing activin A and GSK3 β inhibitor to induce differentiation into definitive endoderm cells and culturing the definitive endoderm cells with an inducer medium B containing fibroblast growth factor, GSK3 β inhibitor, and optionally further containing bone morphogenetic protein, and then culturing them in the presence of extracellular matrix with an inducer medium B containing fibroblast growth factor, GSK3 β inhibitor, and optionally further containing bone morphogenetic protein to form a ventral hindgut organoid.