METHOD OF WASHING ADHERENT CELL USING TREHALOSE-CONTAINING CELL-WASHING SOLUTION

ABSTRACT

It is to provide a method of washing an adherent cell, capable of effectively suppressing cell death due to proteolytic enzyme treatment for detaching the adherent cell from a culture vessel and subsequent cell treatment; a cell-washing solution used for the washing method; a method of producing a cell suspension for transplantation using the cell-washing solution; and a kit comprising the cell-washing solution. Trehalose or its derivative or a salt thereof is added to a physiological aqueous solution to prepare a cell-washing solution containing trehalose or its derivative or a salt thereof as an active ingredient. The cell-washing solution can be used to wash an adherent cell before detaching the adherent cell from a culture vessel by proteolytic enzyme treatment to suppress (inhibit) cell death (apoptosis or the like) due to the proteolytic enzyme treatment. The concentration of trehalose applied to the cell-washing solution may be a concentration capable of suppressing (inhibiting) the cell death (apoptosis or the like) due to the proteolytic enzyme treatment, and is typically 0.1 to 20 (w/v)%, preferably 1 to 15 (w/v)%, more preferably 1.0 to 7.0 (w/v)%, still more preferably 3 to 5.0 (w/v)%.

(No Suitable Figures)

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It is to provide a method of washing an adherent cell, capable of effectively suppressing cell death due to proteolytic enzyme treatment for detaching the adherent cell from a culture vessel and subsequent cell treatment; a cell-washing solution used for the washing method; a method of producing a cell suspension for transplantation using the cell-washing solution; and a kit comprising the cell-washing solution. Trehalose or its derivative or a salt thereof is added to a physiological aqueous solution to prepare a cell-washing solution containing trehalose or its derivative or a salt thereof as an active ingredient. The cell-washing solution can be used to wash an adherent cell before detaching the adherent cell from a culture vessel by proteolytic enzyme treatment to suppress (inhibit) cell death (apoptosis or the like) due to the proteolytic enzyme treatment. The concentration of trehalose applied to the cell-washing solution may be a concentration capable of suppressing (inhibiting) the cell death (apoptosis or the like) due to the proteolytic enzyme treatment, and is typically 0.1 to 20 (w/v)%, preferably 1 to 15 (w/v)%, more preferably 1.0 to 7.0 (w/v)%, still more preferably 3 to 5.0 (w/v)%.