

ABSTRACT

5 Provided are a culture device for neuronal network
formation that makes it possible to construct a neuronal
network while restricting movement of neurons grown in
the culture medium, and a means for the use thereof. A
culture device for neuronal network formation in which is
formed a cell fixation part surrounded by a plurality of
projections on a flat substrate that can be filled with
10 cell culture medium, and in which (1) there are
established spaces having widths such that the neuron
cells cannot pass through between the plurality of
projections, (2) the inner diameter is such that the cell
fixation part can house the cells of from one to a number
15 of neurons, (3) the substrate surface, which is the
bottom of the cell fixation part, is coated by an
extracellular matrix-forming substance and/or provided
with minute through-holes for suctioning culture medium
by a suction device on the lower side of the substrate
20 surface.