

Abstract

The present application provides an culture vessel active-oscillation slide mechanism and a shaker incubator, which can improve the overall stiffness and stability of the slide mechanism to avoid the creation of lateral bending moment while ensuring the culture vessel in the shaker incubator to fully extend out, and can also simplify the assembly complexity of a stroke amplification mechanism and reduce the number of parts. The culture vessel active-oscillation slide mechanism comprises a slide power transmission device, a slide stroke amplification mechanism and a slide mounting plate. The slide power transmission device can convert a rotational motion of an output shaft of a slide drive motor into a linear displacement in a direction of width. The slide stroke amplification mechanism amplifies the stroke of the linear displacement of the slide power transmission device in the direction of width. Rigid multi-stage rails are mounted on two sides of the slide mounting plate in a direction of length of the incubator body. In the multi-stage rails are configured to, by means of stages of rails partially sliding out relative to each other, support a culture vessel carrier mounting plate that fully extends out after the stroke is amplified.

(Fig.7)