

Abstract

The present application belongs to the technical field of biopharmaceutical production devices, and discloses a culture vessel carrier automatic slide mechanism and a shaker incubator, by means of which a shake flask/shake tube/well plate carrier assembly can automatically slide in and out relative to an incubator main body. The culture vessel carrier automatic slide mechanism comprises a slide protective housing and is provided with a culture vessel carrier bearing member. A first slide rail and a second slide rail are arranged below the culture vessel carrier bearing member. The second slide rail is arranged below the culture vessel carrier bearing member and located above the first slide rail, and the first slide rail is arranged inside the incubator main body on a fixed base that does not slide. An intermediate slide rail fixing plate secured to an inner wall of the slide protective housing is connected between the first slide rail and the second slide rail, and a sliding channel is provided on each side of the intermediate slide rail fixing plate. During sliding out and in, the sliding channels on the intermediate slide rail fixing plate can synchronously slide with the second slide rail, and the second slide rail can slide relative to the intermediate slide rail fixing plate, so as to achieve two-stage sliding of a bearing tray of the shake flask/shake tube/well plate carrier assembly arranged on the slide protective housing.