

ABSTRACT

An intelligent system for gene synthesis and monoclonal picking, comprising: a core operation module for performing operations associated with gene synthesis and monoclonal picking; and a control system for controlling at least a part of operations of corresponding compartments of the core operation module. The core operation module at least includes: a liquid operation compartment for performing operations of mixing gene fragments and mixing synthesizing reagents with biological samples in the process of gene synthesis; a purification compartment for performing purification operations on nucleic acid products created after the mixing; an amplification compartment for performing amplification operations and error correction operations on fragments of the nucleic acid products and performing culturing and amplification operations on vectors; and a monoclonal picking compartment for performing monoclonal picking operations on purified and cultured nucleic acid products.

Fig. 2