

APPARATUS FOR SECURELY PROCESSING BIOLOGICAL SAMPLE

ABSTRACT

An apparatus for securely processing biological sample is used to wash, separate, or purify biological molecules, such as DNAs, RNAs, and proteins. The apparatus comprises at least one semi-permeable membrane column, a vacuum manifold, and at least one optional adaptor column. The semi-permeable membrane column is loosely received in the slot of the vacuum manifold. When the adaptor column is used, the semi-permeable membrane column is loosely received in the adaptor column, and the adaptor column is loosely received in the slot of the vacuum manifold. The apparatus also comprises sealing elements which are inserted between the column and the slot. When the semi-permeable membrane column contains liquid sample and vacuum is applied to the vacuum manifold, the liquid in the semi-permeable membrane column can be drawn out of the column through the membrane. When compared with conventional apparatuses, the assembling and disassembling of the apparatus of the present invention are more convenient and the safety of operation can be enhanced.

Figure 4