ABSTRACT

To verify an action of a high-frequency ac electric field on a single-stranded nucleic acid existing in an aqueous solution. This action is used to improve the efficiency of hybridization to which the single-stranded nucleic acid is subjected as a complementary strand. Provided are a method and system for stretching a single-stranded nucleic acid, which exists in a free form in pure water or an aqueous solution (R) of pH 5 to 11, or which exists in a form immobilized on one of surface (f) of an electrode (E) of opposing electrodes (E,E) arranged facing the aqueous solution (R) or in a form immobilized on surfaces (f) of both electrodes (E) of opposing electrodes (E, E), by causing a high-frequency ac electric field to act on the single-stranded nucleic acid.