

## METHOD FOR SCREENING FOR PEPTIDE USING MULTIPLE LIBRARIES

[Document Name] Abstract

The present invention provides a method for screening for a candidate peptide capable of binding to a target molecule, the method including the steps of: (1) preparing a plurality of nucleic acid display libraries containing a barcoded peptide-nucleic acid complex, wherein the barcoded peptide-nucleic acid complex contains a nucleic acid moiety and a peptide moiety, the nucleic acid moiety contains a barcode sequence and a nucleic acid sequence encoding the peptide, and the plurality of nucleic acid display libraries are nucleic acid display libraries, each of which is independently produced by translation using a cell-free translation system; (2) mixing the plurality of nucleic acid display libraries to prepare a mixed nucleic acid display library; (3) bringing the mixed nucleic acid display library into contact with the target molecule; and (4) amplifying a nucleic acid corresponding to the nucleic acid moiety of the barcoded peptide-nucleic acid complex bound to the target molecule, using a barcode primer.

[No available figure]