

PRIORITY NUMBER

102023000021963

PRIORITY DATE

10/20/2023

PATENT STATUS



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Italy

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INTERNATIONALIZATION

RESEARCH TEAM | **INVENTORS**

Alessandro Angelini, Sara Linciano, Ylenia Mazzocato, Zhanna Romanyuk

HEALTH & BIOMEDICAL

Platform for the rapid selection of peptide binders against multiple targets

BIOTECH | DRUG DESIGN & DELIVERY SYSTEMS | NEW DRUGS & THERAPIES

Peptide drugs share both the advantages of biologics, such as high efficacy and low toxicity, and small molecules, such as high stability and low cost. We have, therefore, developed a biotechnological process capable of generating peptide ligands against a pharmaceutical target of interest starting from very large diversities.

Technical Features

The invention is a biotechnological process for the generation of a large number (> 1 billion) of different small peptide ligands. The method allows the selection and the characterization of peptides with suitable chemical, biological and physical properties. The generation, selection, characterization, and production of these biomolecules occur through a biotechnological process, that is rapid, environmentally friendly, finely controlled and flexible. Its main application is the identification of new biopharmaceuticals. Additional applications include veterinary, phytotherapeutic, diagnostic and food applications.

Possible Applications

- Pharma: identification of new biomolecules as innovative biological drugs with high specificity and reduced cost
- Veterinary: identification of new biomolecules in the veterinary field with high specificity and
- Biosensor: identification of new biomolecules for diagnostics and innovative sensor

Advantages

- Biomolecules and technology flexibility
- Biocompatibility and eco-sustainability of the selection and production process
- Implementation of the platform with artificial intelligence and bioinformatic
- The process can be easily automatised and digitised







