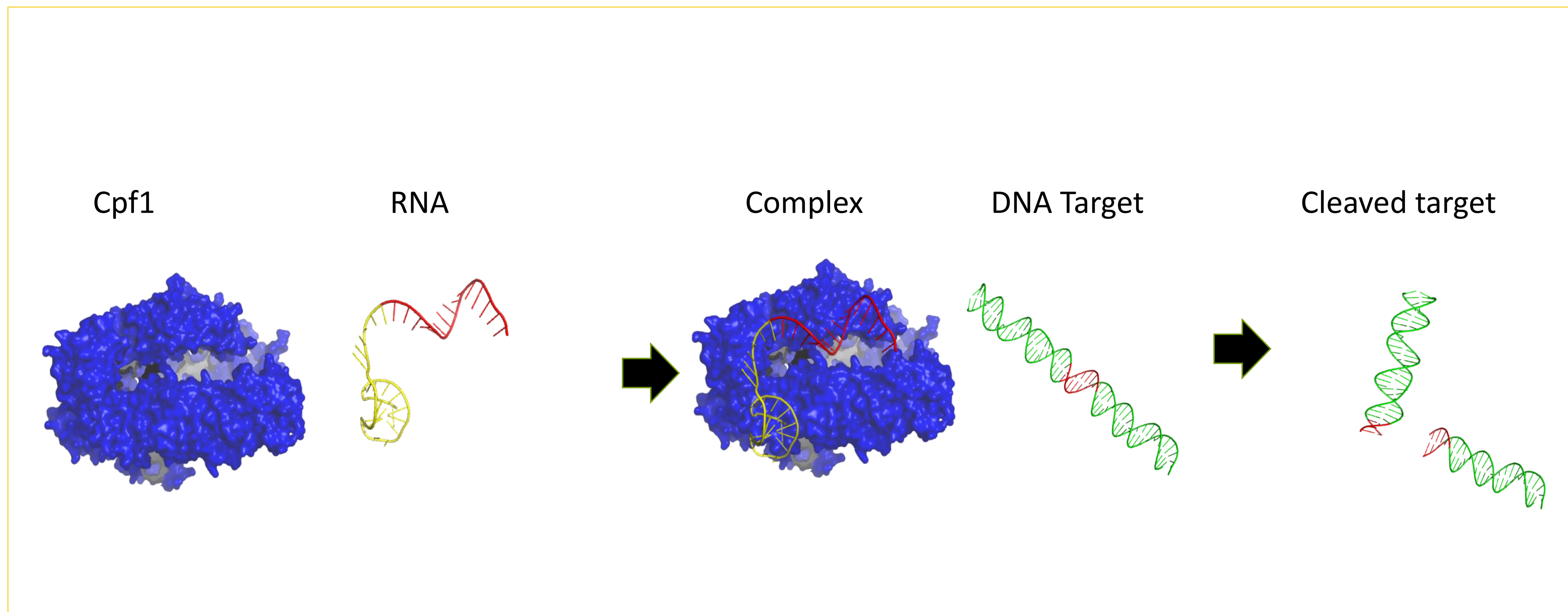


Restriction Enzymes v2.0

- New set of restriction enzymes.

Biotech and
Health Care



Value proposition/USP

Restriction enzymes (REs) are vastly used in many fields in science from traditional cloning experiments to DNA mapping. There are 2 major limitations in the canonical REs

- 1- each REs recognize one specific sequence, and while the number of these enzymes is quite large they are not yet enough to recognize all possible DNA sequences.
- 2- each canonical REs is a different protein, and although many of them are produced recombinantly, each REs require some adjustments in the production to maximize the yield, this will ultimately affect the cost of the products.

UCPH now has a new proprietary tool to generate RE version 2.0 that do not have these limitations.

This new class of REs is made of a constant protein part (Cpf1), and of a variable RNA part that will provide the DNA specificity to the enzyme. The assembly of these two components will produce enzymes able to cut any user-defined DNA sequences. Furthermore, in this RE-2.0, because the RNAs are quite short (42 bases) their production is very easy and standard. This together with the fact that the protein, Cpf1 is the same in all enzymes, will allow the production of all the RE-2.0 with a single protocol and at the same cost.

Business Opportunity/Objective/commercial perspectives

UCPH is looking for a partner that will bring the tool to the market and/or be investor in a small company for fully maturing this new technology.

Technology description/technology Summary

The present technology relates to a new class of REs v2.0 that are able to recognize any user-defined sequences, and the production of this RE-2.0 will be standardized to a unique price regardless the sequences targeted.

Development phase/current state

Protein, RNAs and some complexes are already available. Preliminary experiments and cleavages assay have been successfully achieved.

The inventors

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Intellectual property rights: The invention is protected in a non-published patent application