Because genetic engineering is diverse and sophisticated, e-Zyvec also assists you with:

- **Multicistronic vectors**: integrating several (2 to 4) independent expression cassettes.
- **CRISPR-Based strategies**: regular knock-out or knock-in vectors as well as transcriptomic or epigenic regulation or locus imaging tools.
- **Promoter validation**: ready-to use kit or customized cellular assays.
- **DNA vectors for viral particles :** lentiviruses, AAV…
- Any tailor-designed vector that really fits your needs!

All - and more - available at **www.e-zyvec.com**

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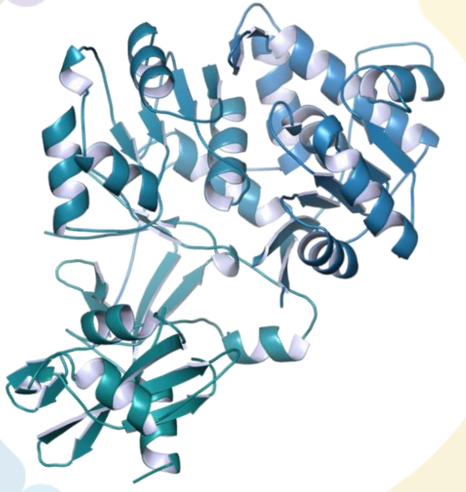
80 rue du Dr Yersin
59120 Loos - France

+33 (0)3 59 61 50 43
contact@e-zyvec.fr

e-Zyvec

DNA vectors made easy

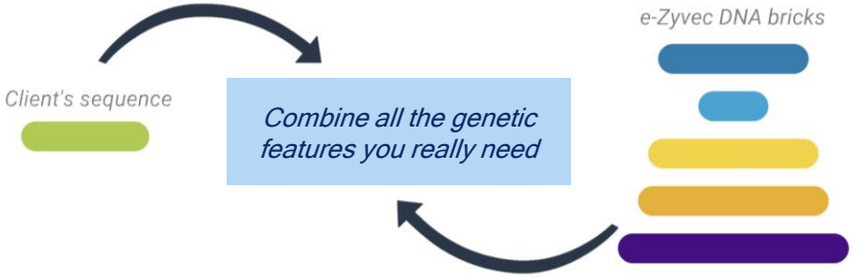
Protein Engineering



e-Zyvec proprietary assembly method

We

co-design the vectors



You

get ready-to-use molecules

Unique tailor-made vector that exactly fits your requirements

Series of related tools available to test all the hypotheses

Protein engineering

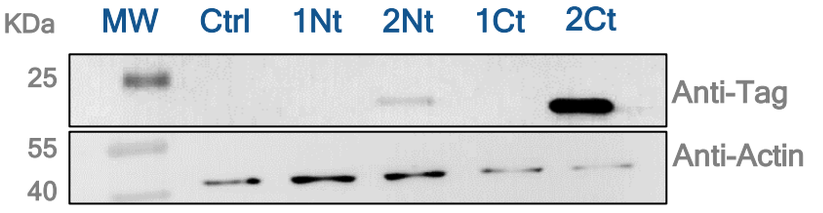
- **Any ORF can be included**: we can work from your own plasmids, commercially available verified ORFs or gene synthesis -codon optimized- products. Large ORFs (up to 15 Kb) are also handled.
- **Combinatorial ORF modifications**: if you need to generate several variants of your protein (mutants, tagged, deleted or fused proteins) we can assemble the corresponding vectors simultaneously. It's faster and cheaper than DNA synthesis.
- **No restriction hassle**: since our seamless assembly method does not rely on the presence of restriction site, you have an absolute freedom in designing your protein modifications.

Example

Validation of tagging strategies for immuno-precipitation (IP)

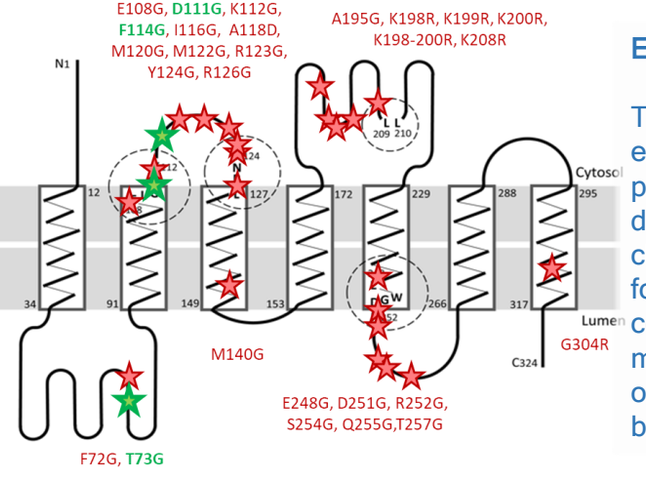
In this example immunoprecipitation performance has been assessed by modulating the position and number of epitope tag targeted by antibodies.

Western Blot



Better dealing with point mutations

Modified codons are introduced within the DNA stitches between DNA bricks. Successful assembly have a >99% rate of effective mutagenesis. Multiple mutagenesis is easy to manage, hence saving costs and time.



Explore your proteins:

Typical projects start with an exploratory series of single point mutations (red stars) delivered simultaneously (30 clones / 4 weeks). This is followed by a series of combinatorial multiple mutants (green stars) obtained by re-using existing bricks (10 clones / 2 weeks)