# OFFER TECHNO

# New self-inducible heterologous protein expression system

recombinant protein / heterologous protein / gene expression / bacterial self-induction / plasmid / biotechnology

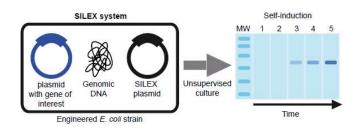
# CONTEXT

The limitations of current recombinant protein production systems include: the use of a transcription inducer and specific medium, low yield, high costs and complex industrial scaling.

## DESCRIPTION

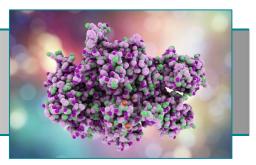
To overcome these difficulties, we have developed a new selfinducible recombinant protein production system. Our technology is based on a SILEX (Self-InducibLe EXpression) plasmid able to transfer to a bacteria the ability to induce autonomously heterologous protein expression without the use of a chemical inducer and a specific culture medium.

SILEX can be used from microliter to large production scales and is compatible with a wide range of existing plasmids.



#### **COMPETITIVE ADVANTAGES**

- Protein production without cell monitoring and without the use of chemical inducer and specific culture medium
- Easy and fast screening of protein production conditions (medium, temperature, plasmid) in order to optimize its yield
- Application from microliter to large production scales with time and cost savings
- It allows the production of complex proteins (poorly soluble), which is currently difficult with existing systems





### Markets & applications

**Biotechnology** : production of recombinant proteins at laboratory (research community and commercial suppliers) or industrial scale (pharmaceutical, agri-food industry...)



#### **Development stage**

Technology tested i) on over 40 heterologous proteins, ii) with over 10 media and iii) on 96-well plates with volumes as low as 25µl



#### <u>Research team</u>

"Centre des Sciences du Goût et de l'Alimentation" (Dijon, France)



#### **Intellectual property**

Patent WO2016046137 (09/2014): granted in the USA, European grant in progress in France and Belgium



#### <u>Target partnership</u>

Patent licensing or services in protein production

#### **CONTACT-US**



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