Louvain Technology Transfer Office

TECHNOLOGY OFFERS | MATERIAL TRANSFER SOFTWARE LICENSE SERVICES

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Optimizing bacterial strain design for increased protein production

KEYWORDS

- Genetic design
- Bacterial chaperones
- « hard to produce » protein

Technology Market:

Protein Production Industry

Until now, no or very little efforts have been made regarding the genotype of the bacterial strain used for recombinant protein production concerning:

- Deletion of proteases
- Overexpression of chaperones
- Modification of the exportation system
- Vectors used for the overexpression
- Removal of contamiants proteins
- ...

The Collet Lab Expertise:

- ✓ Physiological comprehension of molecular processes and modifications of the bacterial genetic background
- ✓ Production in the periplasm: Disulfide bridges formation, Glycoproteins, membrane proteins, …
- ✓ Chaperones and repairs systems

The UCL collaboration offer

On demand optimization of already established strains (BL21,…):

- by adding specific genetic features (chaperones, proteases, S-S formation proteins, ...) (Fig. 1)
- through overexpression or deletion of dedicated genes to enhance recombinant protein production in the periplasm or the cytoplasm of bacteria (Fig. 2)

The lab offers a large panel of to increase the production of hard to produce proteins

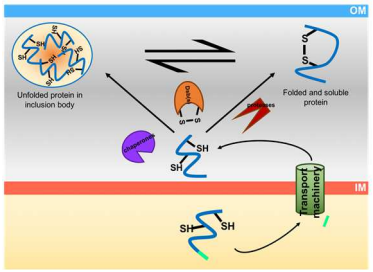

Fig 1.

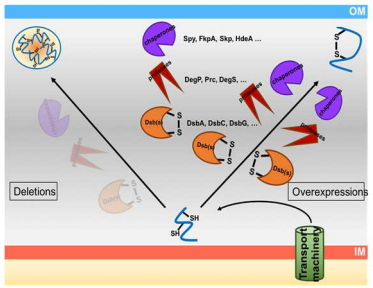

Fig 2.

Preferred partnership

Fee for service to compagnies in need to increase the protein yield in *E. coli* .

INTERESTED TO BENEFIT FROM THESE SERVICES ?

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