



twb
White Biotechnology
center of excellence



PLASMID AND STRAIN ENGINEERING

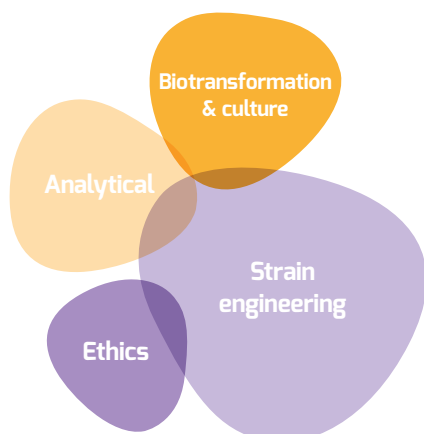
Our strengths

Custom service with personalised support:
*definition of the best strategy depending
on the specifications*

E. coli and S. cerevisiae expertise
*and feasibility studies for other
microorganisms*

Increased through-put by automation

**Integrated offer for microbial growth and
metabolite analysis**



*An integrated solution tailored to the needs,
to accelerate the development of
industrial biotechnology*

Our service

- **Construction of plasmids**
- **Construction of mutagenesis libraries: site-directed and semi-random mutagenesis**
- **Genome engineering: gene knockout and site specific insertions**

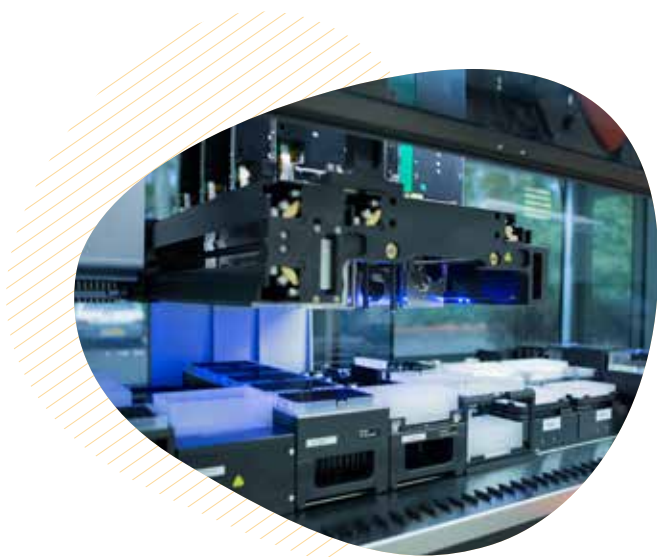
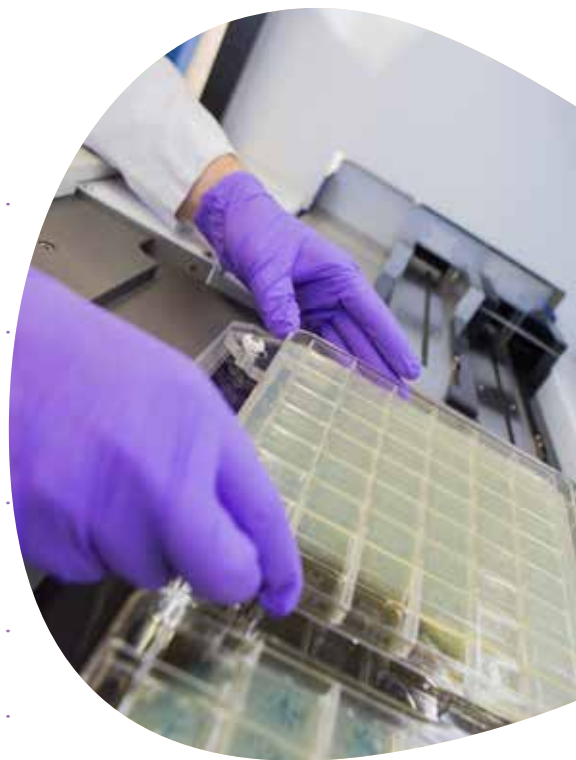
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- Construction of plasmids for prokaryotic or eukaryotic systems (bacteria, yeasts): custom design, cloning, shuttle and expression plasmids, genetic tools development
 - Sequence design, mutagenesis libraries construction, sequencing, cloning in a suitable expression system
 - Site specific insertion of gene cassettes and gene knock out
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Deliverables

- Plasmids in solution (tubes or 96 wells micro-plates)
- Genomic DNA (tubes or 96 wells micro-plates)
- Mutagenesis libraries
- Engineered microorganism strains

Equipment

- **Liquid handling robotic stations** (Hamilton): nucleic acid preparations, cloning, strain engineering
- **High-throughput colony-picker** (Molecular Devices QPix460)
- **Capillary electrophoresis** (proteins, nucleic acids): high-throughput (Perkin Elmer Labchip GXII) and average throughput (Bioanalyzer Agilent)
- **Multimode microplate reader** (Perkin Elmer Enspire): UV, visible, fluorescence
- **Thermal cycler** 96/384 wells (Biorad C1000 touch)
- **Cell homogeniser** (MP Biomedicals FastPrep 96)



Additional services

- Synthetic biology,
- molecular biology,
- microbial genetics,
- strain engineering,
- metabolic engineering projects.

Contact

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Customised estimate on request

