

Press Release

Groundbreaking Synthetic Fermentation Technology licensed by ChromaCon

February 10, 2015

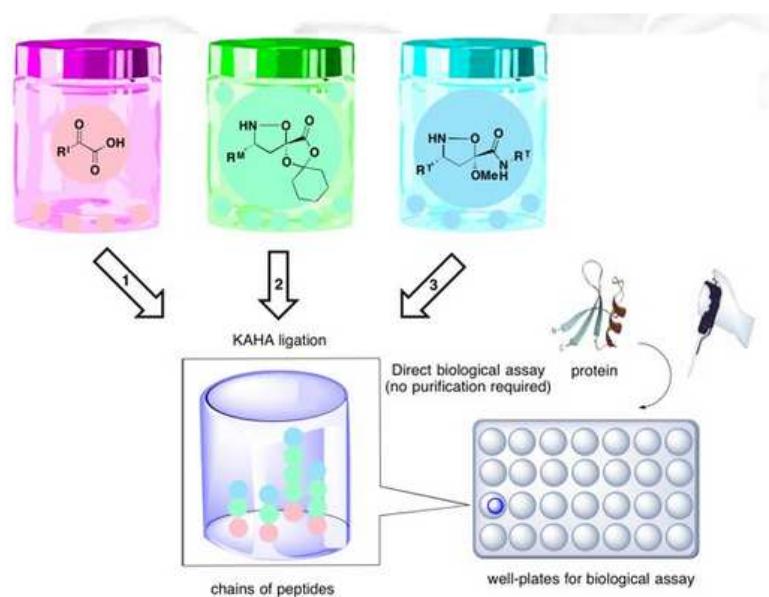
Zurich, Switzerland, February 11, 2015 – ChromaCon acquires exclusive license for a groundbreaking technology for the generation of stable affinity molecules

The technology called “Synthetic Fermentation Technology” was invented by Professor Jeffrey Bode and colleagues at ETH-Zürich and Nagoya University who have developed a new method to build large libraries of bioactive molecules - which can be used directly for biological assays - by simply mixing a small number of building blocks in water. By using a highly selective amide-forming ligation, the reaction proceeds with high efficiency without requiring organisms or enzymes. The fermentation products can be screened directly for biological activity without any purification.

Prof. Bode and his group were inspired by Nature’s approach to rapidly generate complex molecules by microbial fermentation, so instead of using reagents or enzymes to combine simple building blocks into complex molecules, they decided to synthesize such molecules by synthetic fermentation with novel chemical reactions using carefully designed precursors.

The technology principle, published online on September 7, 2014 in Nature Chemistry as an Advanced Online Publication, is expected to be a powerful and practical method to allow rapid generation and screening of active molecules useful for drug discovery and other industrial applications.

The technology allows ChromaCon to generate highly stable affinity binders as reagents and other diagnostic and therapeutic applications



CREDIT: ITBM, NAGOYA UNIVERSITY

Michael Bavand, CEO of ChromaCon commented: "We are excited having licensed this important technology allowing us to develop a new business based on affinity reagents. Affinity reagents for biopharmaceutical applications have been limited in their use due to their limited stability and specificity. With the beta peptides generated by the synthetic fermentation technology we will be able to address a significant and growing unmet need in affinity bioprocessing and other applications".

To find out more about the Synthetic Fermentation Technology, please see the media coverage below. For information about ChromaCon please contact us directly or visit our website www.chromacon.com

Media Coverage and Related Links:

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- Chemistry World "[Bringing chemical synthesis to the masses](http://www.rsc.org/chemistryworld/2014/09/bringing-chemical-synthesis-peptide-enzyme-reagent-free-masses)" (September 7, 2014)
<http://www.rsc.org/chemistryworld/2014/09/bringing-chemical-synthesis-peptide-enzyme-reagent-free-masses>
- EurekAlert! "[Pick 'n' Mix](http://www.eurekalert.org/pub_releases/2014-09/iotb-m090714.php)" chemistry to grow cultures of bioactive molecules" (September 8, 2014)
http://www.eurekalert.org/pub_releases/2014-09/iotb-m090714.php
- Genetic Engineering and Biotechnology News "[Synthetic Fermentation](http://www.genengnews.com/gen-news-highlights/synthetic-fermentation-fills-gap-between-molecular-synthesis-and-microbial-fermentation/81250320/)" Fills Gap between Molecular Synthesis and Microbial Fermentation" (September 8, 2014)
<http://www.genengnews.com/gen-news-highlights/synthetic-fermentation-fills-gap-between-molecular-synthesis-and-microbial-fermentation/81250320/>
- Chemical & Engineering News "[Building Block Chemistry Makes Complex Unnatural Peptides Simply](http://cen.acs.org/articles/92/i36/Building-Block-Chemistry-Makes-Complex-Unnatural-Peptides-Simply)" (September 8, 2014, Access to members only)
<http://cen.acs.org/articles/92/i36/Building-Block-Chemistry-Makes-Complex.html>
- Innovations Report "[Growing](http://www.innovations-report.com/html/reports/life-sciences/growing-molecules-on-plates.html)" molecules on plates" (September 10, 2014)
<http://www.innovations-report.com/html/reports/life-sciences/growing-molecules-on-plates.html>
- Nature Chemistry "[Public Libraries](http://www.nature.com/nchem/journal/v6/n10/full/nchem.2070.html)" (September 22, 2014)
<http://www.nature.com/nchem/journal/v6/n10/full/nchem.2070.html>
- Nature Chemistry Editorial "[Inspiration comes naturally](http://www.nature.com/nchem/journal/v6/n10/full/nchem.2081.html)" (September 22, 2014)
<http://www.nature.com/nchem/journal/v6/n10/full/nchem.2081.html>

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About ChromaCon

ChromaCon AG is a private Life Science Tool company located in Zürich, Switzerland, providing novel, best-in-class chromatographic process solutions to the biopharmaceutical industry. ChromaCon has developed and patented process principles, process control, equipment designs and operating software for cyclic and continuous chromatography, providing significant CAPEX and OPEX cost savings and enabling scalable chromatographic solutions for large scale purification applications. It's Contichrom® CUBE entry-stage equipment is marketed worldwide. ChromaCon has provided global licenses for its process technologies to LEWA for implementation into scale-up systems and to Knauer for HPLC equipment. In addition, ChromaCon develops and markets affinity purification solutions for column and membrane chromatography applications and tools for site-specific protein conjugation.