

# BACHEM

## OLIGONUCLEOTIDE GENERICS



# CUTTING-EDGE TECHNOLOGIES TAILORED TO SCALE AND CAPACITY

**UPSTREAM**

**Synthesis**  
Scale-based modalities for synthesis and cleavage and deprotection

**DOWNSTREAM**

**Ultrafiltration**  
Ultrafiltration capabilities tailored to capacity of respective facility

**Purification**  
Continuous Chromatography for large-scale and greener purification

**Lyophilization**  
Large lyophilization capacity with specialized freeze dryers and certified clean rooms

0.2 mmol      2000 mmol

SBT/ TOP LPOS

MCSGP

ANALYTICS

# SCALABLE AND GREEN PRODUCTION WITH PRECISE QUALITY CONTROL

## SEAMLESS SCALABILITY AND BETTER QUALITY CONSISTENCY WITH NEW PROPRIETARY TECHNOLOGIES:

Supplying higher volume of API for larger patient population with Stirred-bed (SBT) and Tag-assisted (TOP) liquid phase synthesis (LPOS)

- **Consistent:** More homogeneous batches
- **Flexible:** Seamless scalability up to hundred kg scale
- **Green:** Potential to save solvent and reduce process mass intensity

SBT/ TOP LPOS

## FULLY AUTOMATED SYSTEM WITH EFFICIENT RECYCLING OF FRACTIONS:

Making the oligonucleotide manufacturing greener and cost-efficient with Continuous Chromatography\*

- **Efficient:** Higher yields and better cost-effectiveness
- **Fast:** Decreased campaign duration
- **Green:** Reduced waste & process mass intensity

MCSGP\*

## INCREASING PRECISION OF QUALITY CONTROL AND IMPURITY REPORTING WITH INNOVATIVE MASS SPECTROMETRY:

Addressing authorities requirements for registration with a new mass spectrometry (MS) algorithm

- **Robust:** 100% sequence coverage
- **Precise:** Unmatched impurity characterization under GMP
- **Fast:** Automated MS data analysis

ANALYTICS

\* Continuous Chromatography or MCSGP: Multicolumn Countercurrent Solvent Gradient Purification

# CHOOSING THE RIGHT PARTNER

Pushing the boundaries of innovation to unlock the full potential of generic oligonucleotides development

Innovative proprietary technologies for scalable synthesis and better batch consistency



Decades of experience in the manufacturing and registration of complex molecules



More sustainable large-scale manufacturing with Continuous Chromatography



Innovation in analytics to accelerate development and registration



## Marketing & Sales Contact

### Americas

**Bachem Americas, Inc.**  
Tel. +1 888 422 2436  
(toll free in USA & Canada)  
+1 310 539 4171  
sales.us@bachem.com

### Asia Pacific

**Bachem Japan K.K.**  
Tel. +81 3 6661 0774  
sales.jp@bachem.com

### Europe, Africa, Middle East and India

**Bachem AG**  
Tel. +41 58 595 2020  
sales.ch@bachem.com

Visit our website [www.bachem.com](http://www.bachem.com)

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