# VALIDOGEN UNLOCK PICHIA® SERVICES

## CUSTOMIZED PROJECT SETUP IN SMALL, MODULAR PACKAGES SUITABLE FOR EVERY INDUSTRY

WITH MANUFACTURABILITY IN MIND

With manufacturability in mind, VALIDOGEN is addressing today's protein manufacturing challenges by early consideration of production strain and process requirements. The individual needs of different industries including biopharma, food & feed, industrial biotechnology, and diagnostics are reflected in our customizable and flexible project setup. Clients from all industries can benefit from our powerful protein production technology platform and modular approach utilizing the most relevant UNLOCK PICHIA<sup>®</sup> tools for their protein of interest or their field of application.



PROTEIN EXPRESSION FEASIBILITY STUDIES

Speedy determination of protein expression potential in Pichia



**PICHIA PRODUCTION STRAIN DEVELOPMENT** Generation of high-performance protein expression strains



BIOPROCESS DEVELOPMENT

Robust and scalable fermentation & protein purification



FAST & RELIABLE ANSWERS

#### PROTEIN EXPRESSION FEASIBILITY STUDIES

- Fast assessment of expression feasibility and potential for further improvement
- Immediate answers for a reliable go/no-go decision
- Results from micro-scale screening transferable to bioreactor cultivation
- Microbioreactor system to aid comparative strain evaluation
- Rapid generation of protein samples and protein production strains



OPTIMIZED YIELDS & INDUSTRIAL PRODUCTION STRAINS

# PICHIA PRODUCTION STRAIN DEVELOPMENT

- Accelerated generation of high-performance expression strains optimized for the production of commercial protein products
- Enhancement of production levels & product quality
- Fast and straightforward production of non-GMP protein samples
- Reduced downstream processing efforts due to low levels of secreted impurities
- Full documentation of UNLOCK PICHIA® toolbox elements to simplify and support your regulatory filings



SCALABLE FERMENTATION & PROTEIN PURIFICATION PROCESSES

### **BIOPROCESS DEVELOPMENT**

- Reduced manufacturing costs through optimized VALIDOGEN cultivation protocols
- Scalable, robust, transferable, and cmc-ready manufacturing system
- Intensified processes high product titer and short cultivation time
- Protein purification process development for a robust scalable downstream process
- Full documentation to simplify and support your regulatory filings