

PRESS RELEASE

VALIDOGEN Introduces Next-Generation Synthetic Methanol-Free Promoters for *Pichia pastoris*

Grambach, Austria – 25.02.2026 – [VALIDOGEN GmbH](#), a leading contract research and development organization specializing in recombinant protein expression, strain engineering, and protein production process development, has announced the launch of its **next-generation synthetic methanol-free promoters**. Working with their proprietary **UNLOCK PICHIA® platform** this represents a significant advancement for protein production in *Pichia pastoris*.

For more than 15 years, VALIDOGEN has been supporting customers applying both methanol-induced and methanol-free expression systems. The company is now introducing a new synthetic promoter library for next-generation methanol-free *Pichia pastoris* protein production. While preserving efficient process control, these promoters enable substantially increased productivities, directly translating into reduced cost of goods and facilitating robust and scalable production processes.

Next-generation synthetic methanol-free promoter library designed for enhanced process control and productivity

The new promoters are based on a synthetic architecture combining engineered promoter fragments with selected sequence elements derived from native yeast promoters. This enables tunable and time-controlled initiation of recombinant protein production without the use of external inducers. Glycerol or glucose is used as the sole carbon source throughout the process, avoiding metabolic burden associated with carbon source switching, and supporting productive expression without excessive cellular stress.

“Controlled methanol-free expression in *Pichia* is not new to VALIDOGEN. We introduced and established this technology in an industrial setting more than 15 years ago, and it has been commercially implemented in bioreactors of up to 200,000 L,” said Roland Weis, Head of Operations at VALIDOGEN. “What is new is the level of control and productivity that can now be achieved. Using just generic, non-optimized bioreactor protocols, we have obtained supernatant titers exceeding 20 g/L for several protein classes, demonstrating performance comparable to, and in some cases exceeding, methanol-induced systems.”

Enhancing the UNLOCK PICHIA® technology portfolio with compelling economic benefits

“Rather than replacing the well-established methanol-induced AOX1 systems, which remain highly effective and continue to be available at VALIDOGEN where appropriate, this new promoter library broadens the range of solutions we can offer our customers through the UNLOCK PICHIA® platform”, said Thomas Purkarthofer, CEO of VALIDOGEN. “Enhanced productivity, simplified process control, lower oxygen demand, and reduced cooling requirements make our methanol-free *Pichia* protein production processes highly attractive to our customers. In addition, there is no longer a need to identify a manufacturing site equipped to handle methanol at large scale.”

About VALIDOGEN

VALIDOGEN GmbH is an Austrian contract research and development organization specializing in recombinant protein expression using *Pichia pastoris*. Through its proprietary [UNLOCK PICHIA® technology](#), VALIDOGEN provides customized solutions for [methanol-induced](#) and [methanol-free](#) protein production, supporting customers from [early feasibility and lead identification](#) through [strain](#)

[development, fermentation process development, scale-up, and technology transfer](#) toward commercial manufacturing. For further information, please visit <https://www.validogen.com>.

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