

# Syntekabio Begins Full-Scale Operation of AI-Driven Asset Program

*Syntekabio Launched AI Asset Programs to Identify Antibody and Small-molecule Drug Candidates*

NEW YORK, NY, UNITED STATES, October 20, 2025 /EINPresswire.com/ -- AI drug discovery company Syntekabio (KOSDAQ: 226330) announced on October 14 that it has officially launched its AI-driven Asset Programs, aimed at simultaneously identifying antibody and small-molecule drug candidates using the company's proprietary AI supercomputing infrastructure.



Syntekabio AI Bio Supercomputing (ABS) Data Center in Dungok, Daejeon

Recently, the global AI drug discovery industry has been shifting rapidly toward performance-oriented outcomes. One notable example is the \$500 billion Stargate Project under construction in Texas — a 4.5 GW-scale data center that integrates AI and supercomputing for biotech innovation. Syntekabio, however, took the lead two years earlier by starting construction of its AI Bio Supercomputing (ABS) Data Center in Dungok, Daejeon, in May 2022, which received operational approval in October 2023. Although smaller in scale (15 MW) than the Stargate Project, the ABS Center shares the same ambition and is already being recognized for producing practical, outcome-driven results.

Syntekabio's Asset Programs build on years of experience applying AI to a wide range of target proteins, including those related to antibodies, oncology, immunology, neurology, and COVID-19 — with eight of them being membrane proteins. These large-scale strategic programs are designed to rapidly generate extensive sets of candidate molecules for targets of interest to global pharmaceutical companies, leveraging the computational infrastructure of the ABS Center. Unlike traditional experimental methods that can take several years, Syntekabio combines supercomputing and AI modeling to shorten the discovery cycle to about six months, enabling the pre-selection of promising drug candidates with a higher probability of success giving the company a clear competitive advantage.

In the antibody segment, Syntekabio applies its proprietary Ab-ARS platform, which enables

advanced design processes. The AI designs the complementarity-determining region (CDR) — the core part of an antibody — and virtually generates tens of thousands of variants. Through 3D structural analysis and binding affinity evaluation, the platform selects optimal candidates for further development. Currently, about 20 antibody target programs are underway, including PD-1, HER2, and IL-23.

For small-molecule drug discovery, the company employs its LM-VS (Language Model Virtual Screening) platform. Based on large-language-model virtual screening technology, LM-VS can rapidly explore chemical libraries of over 10 billion compounds to identify high-potential candidates. It then applies 3D-CNN structure prediction, binding-energy calculations, and molecular-dynamics simulations to optimize the selection of candidates for specific target proteins.

Approximately 20 small-molecule programs are currently in progress, focusing on difficult-to-treat cancers and metabolic disorders, including KRAS, JAK, and GLP-1R. At present, Syntekabio dedicated about 2,000 supercomputing units at the ABS Center to run antibody and small-molecule discovery projects in parallel. Candidate molecules are being prioritized through discussions with global marketing partners, and the company is pursuing a pre-order-based business model. Syntekabio plans to continue discovering new candidates while also exploring licensing opportunities.

CEO Jongsun Jung stated “The Asset Program is more than a candidate discovery initiative, it represents a major milestone demonstrating that our proprietary AI drug-discovery platform has entered its commercialization phase. By leveraging the power of supercomputing and differentiated AI algorithms, we will secure large numbers of antibody and small-molecule candidates that global pharmaceutical companies are eager to access, laying the groundwork for meaningful revenue generation.”

Building on this foundation, Syntekabio plans to expand its AI platforms beyond antibodies and small molecules to include bispecific antibodies, antibody–drug conjugates (ADCs), and PROTACs, further strengthening its position in the global drug discovery market.

## About Syntekabio

Syntekabio Co., Ltd. (KOSDAQ: 226330) is an AI-powered drug discovery company integrating biology with advanced machine learning since 2009. The company operates supercomputing infrastructures dedicated to life sciences, alongside a global CRO network to validate computational results. Syntekabio provides technologies and tailored services spanning target identification, hit-to-lead, lead optimization, and IND-enabling studies. Its proprietary platforms — including LM-VS™, DeepMatcher®, SM-ARS, and Ab-ARS — enable clients and partners worldwide to accelerate the path from discovery to clinic.

For more information, visit [www.syntekabio.com](http://www.syntekabio.com) or follow Syntekabio on LinkedIn: <https://www.linkedin.com/company/syntekabio>.

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