



## PRESS RELEASE

---

April 11th, 2025

Epsilon Molecular Engineering, Inc.

### **EME and AprilBio Launch Joint Development of Next-Generation VHH Antibody Therapeutics**

Epsilon Molecular Engineering, Inc. (Head Office: Saitama, Japan; CEO: Naoto Nemoto, “EME”) has entered into a strategic partnership with AprilBio Co., Ltd. (397030.KQ; South Korea, “AprilBio”) to jointly develop next-generation VHH antibody therapeutics. The two companies have signed a Memorandum of Understanding (MOU) aimed at joint research, development, and global commercialization, leveraging each party’s core platform technologies.

This collaboration is built upon AprilBio’s proprietary REMAP (Recombinant and Evolved Multi-specific Antibody Proteins) platform and EME’s cutting-edge high-throughput antibody screening platform. REMAP is based on AprilBio’s SAFA (Serum Albumin Fab-associated) technology, which significantly extends the half-life of therapeutic proteins by targeting serum albumin, thereby enhancing efficacy and patient convenience. The superiority of SAFA has been validated in the global market, and AprilBio has already licensed two SAFA-based therapeutic protein candidates to global pharmaceutical companies. The REMAP platform further advances this concept to enable the creation of multi-specific antibody therapeutics and antibody-drug conjugates (ADCs), optimized for high stability and scalability *in vivo*.

Founded in 2016 as a biotechnology venture originating from Saitama University, EME specializes in evolutionary molecular engineering and antibody/protein engineering. EME has developed a proprietary high-throughput screening platform called “The Month,” which enables rapid and accurate identification of humanized VHH antibody candidates. This platform combines cDNA display technology (a method that links genes and proteins one-to-one for *in vitro* screening) with the PharmaLogical® Library—an artificial humanized VHH antibody library containing over 10–100 trillion variants. The platform allows the identification of specific VHHs, evaluation of binding affinities to antigens, and early-stage profiling of biophysical properties such as thermostability and aggregation tendency within approximately 30 business days. It is especially effective for targeting difficult molecules that conventional methods fail to address.

By integrating EME’s functional VHH antibody candidates into the REMAP platform, the two companies will conduct multidimensional analyses on key attributes such as developability, pharmacokinetics, and druggability. Based on these results, they will jointly formulate a development strategy and implement a staged

commercialization roadmap with a global market in mind. In addition, both parties will closely collaborate on investor relations (IR) and public relations (PR) activities to effectively communicate the scientific and commercial value of the partnership to stakeholders worldwide.

This agreement represents a significant milestone for EME in expanding its antibody platform technology to the global market. Through this partnership, EME aims to demonstrate the innovation of its platform, accelerate the development of novel therapeutics, and broaden the reach of next-generation antibody-based treatments beyond Japan.

**【Contact】**

Epsilon Molecular Engineering, Inc.

Business Development Department

E-mail : [biz\\_dev@epsilon-mol.co.jp](mailto:biz_dev@epsilon-mol.co.jp)