

Sanyou Biopharma launches Super Trillion Peptide Molecule Discovery Platform

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China-based startup Sanyou Biopharmaceuticals has officially announced the launch of its "Sanyou Super Trillion Peptide Molecule Discovery Platform".

The Sanyou Super Trillion Peptide Molecule Discovery Platform is an integral part of the "Sanyou Super Trillion Innovative Biopharmaceutical Discovery Platform (STAL)", with a library capacity of up to 3.05×10^{12} CFU (30 trillion).

The platform is suitable for the R&D of peptide-based drugs targeting diseases such as metabolism, tumors, as well as applications in medical imaging, molecular diagnostics, and other fields. Peptides obtained through the platform screening process can be further developed into various types of novel drugs, including PDCs, RDCs, antibody fusion proteins, and cyclic peptides.

Sanyou Biopharmaceuticals has developed the Super Trillion Peptide Molecule Discovery Platform by collecting and analysing tens of thousands of natural amino acid sequences. The platform incorporates unique patented fusion tag proteins, assisted by AI design, and employs phage display technology, matching eukaryotic expression with high-throughput screening. The rigorous establishment process of the platform ensures that the library sequences follow natural patterns, exhibit high diversity, and undergo comprehensive target validation.

With Super Trillion Peptide Molecule Discovery Platform, Sanyou Pharmaceuticals can screen dozens to nearly a hundred lead molecules with significant sequence differences for a single target. The screened peptides have extremely high affinity, and with the assistance of AI and structure-guided optimisation, they can achieve levels of nM and sub-nM.