

Japanese biotech startup RevolKa to create highly functional proteins by using AI-driven platform

January 24, 2024 | News

Sekisui Chemical signs a contract research agreement with RevolKa



RevolKa, a venture-backed biotech company providing a game-changing protein engineering technology platform, based in Japan, has signed a contract research agreement with Sekisui Chemical.

RevolKa will create and deliver highly functional proteins by using its proprietary protein engineering platform technology, called *aiProtein* which is a robust directed protein evolution technology integrated with artificial intelligence (AI).

Proteins have evolved to biologically functional molecules over hundreds of millions of years. The relationship between protein sequence, structure, and function in those highly crafted molecules remains poorly understood to rationally design a protein sequence for a particular function.

The AI engine is trained with sequence-function relationship data to statistically predict sequences for an evolved protein function. Furthermore, *aiProtein* can evolve more than two functions simultaneously. This technology is a powerful and cost-effective tool for the creation of novel and highly-optimised proteins for pharmaceutical and industrial uses.