

Interprotein Announced Collaborative Research Agreement with SANWA KAGAKU on Drug Discovery Research for PPI Inhibitor

August 8th, 2022 – Interprotein Corporation (Interprotein) today announced that Interprotein and SANWA KAGAKU KENKYUSHO CO., LTD. (SANWA KAGAKU) entered into a collaborative research agreement. The partnership will focus on drug discovery research for a specific protein-protein interaction (PPI)* inhibitor in undisclosed disease area and condition of the contract.

Under the agreement, Interprotein and SANWA KAGAKU will collaborate to identify new drug candidates, combining SANWA KAGAKU's core expertise in drug discovery and development, and Interprotein's platform technology of PPI inhibitors.

***About PPI:**

Protein-protein interaction (PPI) is the general term of biological responses that are produced by binding of two or more protein molecules. For instance, it indicates a binding of cytokine to its receptor followed by intracellular signal transduction from the receptor. Thus, PPI plays an important role in the pathophysiology of many diseases.

About Interprotein

Interprotein is conducting drug discovery researches for challenging drug targets such as protein-protein interactions (PPIs) and ubiquitin-proteasome systems with two (2) platform technologies, INTERprotein's Engine for New Drug Design (INTENDD®)/AI-guided INTENDD® and helix-loop-helix peptide (HLHP; therapeutic peptide with a new modality). By use of these technologies, Interprotein identifies small molecule and/or peptide inhibitors for broad range of drug targets and contributes to improvement of drug discovery productivity.

About INTENDD®/AI-guided INTENDD®

INTENDD® is a proprietary structure-based drug discovery (SBDD) strategy for small molecules and consists of identification of good small molecule binding site and in-silico screening with a unique algorithm for active compound selection, Structure-Based Scaffold Generation (SBSG) method. It enables to identify potent compounds with new scaffolds at high hit rates by binding mechanism-based selection but not docking simulation/molecular dynamics (MD)-based approach. AI-guided INTENDD® is an artificial intelligence (AI)-introduced system for prediction of the small molecule activity, which includes INTENDD's knowhow. It has several advantages such as: 1) purely structure-based (unnecessary for active ligand information), 2) 3D-level atomic coordinate information used for deep learning, 3) suitable for PPI inhibitors, 4) applicable to compounds with good balance of enthalpy- and entropy-driven binding free energy, 5) activity separation into 8 classes. INTENDD® and AI-guided INTENDD® are assumed to be mainly used for hit identification and lead generation/optimization, respectively.

Contact:

Interprotein Corporation E-mail: info@interprotein.com
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