

Interprotein Announces Collaboration with Janssen Biotech, Inc. for Drug Discovery Research Targeting PPI

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Interprotein Corporation (Interprotein) today announced that it has entered into a research collaboration with Janssen Biotech, Inc. (Janssen), one of the Janssen Pharmaceutical Companies of Johnson & Johnson. The collaboration will focus on drug discovery research for a specific protein-protein interaction (PPI) target in an undisclosed therapeutic area. The collaboration will be facilitated by the Johnson & Johnson Asia Pacific Innovation Center.

Under the agreement, Janssen and Interprotein will collaborate to identify active compounds with new scaffolds and high potencies by combining Janssen's outstanding drug discovery expertise and Interprotein's platform technologies, INTENDD®/AI-guided INTENDD®.

The structure of the agreement has not been disclosed.

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 activity prediction system for small molecules, which is including INTENDD's knowhows. 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.

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