

DATE: Day 09 Month 05 Year 2023

**SUMMARY of**  
**2022 RESEARCH RESULTS REPORT**  
**For International Collaborative Research with IPR, Osaka University**

<b>Research Title</b>		<b>Crystallographic fragment screening and structure determination for anticancer target proteins (Phase III)</b>
<b>Applicant</b>	<b>Name</b>	<b>Kim, Hyoun Sook</b>
	<b>Affiliation</b>	<b>National Cancer Center, Korea</b>
	<b>Present Title</b>	<b>Senior Researcher/Principal Investigator</b>
<b>Research Collaborator (Host PI)</b>		<b>Prof. Atsushi Nakagawa and Prof. Eiki Yamashita (Host PI : Prof Atsushi Nakagawa)</b>
<p><b>Summary</b></p> <p>Fragment-based drug discovery is a widely used method in the pharmaceutical industry for the targeted therapy that target new drug candidates. Fragment-based drug discovery allows a more effective exploration of chemical space with a higher hit rate compared to the conventional chemical high-throughput screening. We tried to solve three-dimensional structures of IDO1, IDO2, RPIA, and DCLK1, alone or in complex with their respective inhibitors selected from chemical fragment library screen for development of a novel potential therapeutics. We were able to collect and process data sets. From these data sets, we could successfully identified the electron densities of bound inhibitors in targets.</p>		

**\*Deadline: May 12, 2023**

**\*Please submit it to E-mail: tanpakuken-kyoten@office.osaka-u.ac.jp.**

**\*Please describe this summary within 1 sheet. Please DON'T add some sheets.**

**\*This summary will be published on the web.**