DATE: Day 23 Month 04 Year 2024

SUMMARY of

FY2023 RESEARCH RESULTS REPORT

For International Collaborative Research with IPR, Osaka University

Research Title		Crystallographic fragment screening and structure determination
		for anticancer target proteins (Phase III)
Applicant	Name	Kim, Hyoun Sook
	Affiliation	National Cancer Center, Korea
	Present Title	Senior Researcher/Principal Investigator
Research Collaborator (Host PI)		Prof. Atsushi Nakagawa and Prof. Eiki Yamashita
		(Host PI : Prof Atsushi Nakagawa)

Summary

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, KRAS, TNIK and PGGHG, 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 identify the electron densities of bound inhibitors in targets.

^{*}Deadline: May 10, 2024

^{*}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.