



Jakkaphan Kumsab, PhD

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CONTACT

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WORKPLACE:

- Department of Biotechnology, 5th Floor, Lecture Classroom Building 5 (LC.5), Faculty of Science and Technology, Thammasat University, Pathum Thani 12121, Thailand

EDUCATION

Years	Degrees/ Certificates	Institutes
2020 Japan	Advanced Life Sciences (Ph.D.)	Ritsumeikan University,
2017	Applied Microbiology (M.S.)	Chiang Mai university
2014	Microbiology (B.S.)	Chiang Mai university

WORK EXPERIENCES

Years	Administrative Positions
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Years	Work Positions
2026 – Present	Faculty of Science and Technology, Thammasat University, Lecturer
2023 – 2026	National Science and Technology Development Agency (NSTDA), BIOTEC, Researcher

RESEARCH AREA

Microbiology, Biotechnology, Enzyme, Omics, Biosensor

Scopus Author ID

ORCID ID

WEB of Science Researcher ID

Awards/Scholarships:

Years	Scholarships/ Award Names	Awarding Institutes
-	-	-

Research Grants:

Topics	Research Grants	Years
-	-	-

Topics	Research Grants	Years
-	-	-

Publication:

International publication:

1. Maneekeesorn, S., Yingchutrakul, Y., Simanon, N., Kumsab, J., Butkinaree, C., Moonmuang, S., Li, J., Charoenkwan, P., Koonysying, P., Paradee, N., Srichairatanakool, S., & Chuljerm, H. (2026). Therapeutic Potential of Deferiprone–Resveratrol Hybrid (DFP-RVT) Against Hepatic Iron Overload in β -Thalassemia Mice: A Proteomic Analysis. *Biomolecules*, 16(2), 338. <https://doi.org/10.3390/biom16020338>

2. Tulyananda, T., Yingchutrakul, Y., Tantraphongsathon, K., Khamnuwan, A., Mounng-Ngam, P., Vejchasarn, P., Papan, P., Kumsab, J., Butkinaree, C., Tangphatsornruang, S., Yang, M. C., Maiuthed, A., Channumsin, S., & Krobthong, S. (2026). Foodomics of Rice Grains in Astrobiology: Spaceflight-Induced Modulation of Aroma,

Texture, and Protein Digestibility in Thai Landrace Rice (466HM) Aboard the Shijian-19 (SJ-19) Low Earth Orbit Mission. *Life*, 16(2), 299. <https://doi.org/10.3390/life16020299>

3. Yingchutrakul, Y., Kumsab, J., Simanon, N., Tangphatsornruang, S., & Butkinaree, C. (2025). Integrated multi-omics analysis reveals an interplay of hormonal regulation, antioxidant defense, and lipid signaling during artificial seed aging in *Momordica charantia*. *Plant physiology and biochemistry : PPB*, 229(Pt D), 110754. <https://doi.org/10.1016/j.plaphy.2025.110754>

4. Panti, N., Sirilun, S., Kumsab, J., Yingchutrakul, Y., & Sawangrat, K. (2025). Recombinant expression and characterization of N-terminal 43–amino acid–deleted human apolipoprotein A-I (apoA-I Δ 43) and reconstitution of high-density lipoprotein nanoparticle. *Natural and Life Sciences Communications*, 24(4), e2025074.

5. Kumsab, J., Deenin, W., Charoenkitamorn, K., Yakoh, A., Crespo, G. A., & Chaiyo, S. (2025). One-Step Label-Free Electrochemical Lateral Flow Immunosensor for SARS-CoV 2 Antigen Detection. *ACS measurement science au*, 5(5), 760–770. <https://doi.org/10.1021/acsmesuresciau.5c00096>

6. Kumsab, J., Yingchutrakul, Y., Simanon, N., Jankam, C., Sonthirod, C., Tangphatsornruang, S., & Butkinaree, C. (2024). Comparative Proteomic Analysis of Ridge Gourd Seed (*Luffa acutangula* (L.) Roxb.) during Artificial Aging. *ACS omega*, 9(23), 24739–24750. <https://doi.org/10.1021/acsomega.4c01270>

7. Kumsab, J., Deenin, W., Yakoh, A., Pimpitak, U., Amornkitbamrung, L., Rengpipat, S., Hirankarn, N., Crespo, G. A., & Chaiyo, S. (2023). Integrated lateral flow immunoassays using trimethylsilyl cellulose barriers for the enhanced sensitivity of COVID-19 diagnosis. *Journal of Science: Advanced Materials and Devices*, 8(4), 100620. <https://doi.org/10.1016/j.jsamd.2023.100620>

National publication:

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Conferences:

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Patents/อนุสิทธิบัตร

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