



Y A Y A S A N H A Z A N A H
SEKOLAH TINGGI FARMASI INDONESIA

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SURAT TUGAS

No : 2630/STFI/KPG/IX/2023

Yang bertanda tangan di bawah ini, Ketua Sekolah Tinggi Farmasi Indonesia Bandung, menugaskan kepada :

Nama : Dr. apt. Dewi Astriany, M.Si.
NIP/NIDN : 137500361/ 0410127503
Jabatan : Dosen Tetap

untuk melaksanakan kegiatan **Penelitian dan Pengabdian Kepada Masyarakat** pada Semester Ganjil Tahun Akademik 2023-2024 di Sekolah Tinggi Farmasi Indonesia.

Demikian surat ini dibuat untuk dilaksanakan sebaik-baiknya dengan penuh tanggung jawab.

Bandung, 5 September 2023

Ketua,

Dr. apt. Adang Firmansyah, M.Si.
NIP. 047300051

Tembusan:

1. Yang bersangkutan
2. Arsip



Certificate of Appreciation

This certificate is awarded to

Dr. Apt. Dewi Astriany, M.Si.

as

ORAL PRESENTER

at the International Conference on Contemporary Science and Clinical Pharmacy (ICCSCP) 2023 which held via virtual meeting on October 30th - 31st, 2023 with the theme “Expression And Characterization Of Single-Chain Fragment Variable Antibody In Escherichia coli For Detection Of Dengue Virus NS1 Antigen“

Dean of Faculty of Pharmacy
Universitas Andalas

Prof. Dr. apt. Fatma Sri Wahyuni

Chairperson of ICCSCP 2023

Dr. apt. Suryati, S.Si, M.Sc.



CONFERENCE PROGRAM AND ABSTRACT BOOK

YEAR
2023



INTERNATIONAL CONFERENCE ON CONTEMPORARY SCIENCE AND CLINICAL PHARMACY (ICCSCP) 2023

*Faculty of Pharmacy, Universitas Andalas, Kampus
UNAND, Limau Manis, Padang, West Sumatera, Indonesia*

iccscp.ffarmasi.unand.ac.id

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WELCOME MESSAGE FROM THE ORGANIZING COMMITTEE



Bismillahirrohmanirrahim

Distinguished Speakers and Participants

Assalamualaikum Wr. Wb.

I would like to take this opportunity to extend a warm welcome to all the participants attending this conference. First, let us begin by thanking the Almighty God for His blessings, grace, and mercies that have enabled us to gather here in good health and excellent condition today.

Ladies and gentlemen

In Indonesia, specific regulations guarantee halal certification for various products. The law that outlines these requirements is Law No. 33 of 2014. The Minister of Religion of the Republic of Indonesia's Decision No. 982 of 2019 sets the standards for Halal Certification Services. This law mandates that food and beverage items, cosmetics, medicines, genetically engineered products, biological products, chemical products, and consumer goods used or exploited by the public must be halal-certified. Pharmacists who possess medical knowledge are responsible for raising public awareness about the halalness of pharmaceutical products. They must also provide information about the legitimacy of halal certification for food products, cosmetics, and medicines to guarantee Muslim life and ensure peace of mind for those who use halal products.

The Faculty of Pharmacy, Universitas Andalas, is hosting an international seminar called "INTERNATIONAL CONFERENCE ON CONTEMPORARY SCIENCE AND CLINICAL PHARMACY 2023." The conference aims to increase the knowledge related to pharmaceutical science, including the aspects of drug discovery, development, and pharmaceutical services. It will also focus on halal guarantees and processes. Therefore, the seminar theme is "*An Integrative Discovery, Development and Awareness of Halal and Healthy Pharmaceutical, Cosmetics, Food Products and Care.*" This seminar has been an annual event since 2011 and is attended by academics, government officials, practitioners, students, and industry players.

The international seminar was attended by more than 130 presenters from five countries. We are grateful to all keynote speakers and invited presenters for joining us today to share advanced knowledge and expertise in this scientific event. We would also like to thank the International Journal of Applied Pharmaceutics (IJAP) and Jurnal Sains dan Farmasi Klinik (JSFK) for collaborating in this international seminar. Furthermore, we also thank Persatuan

Saintis Farmasi Indonesia for their role as an external reviewer. We thank the Rector of Universitas Andalas for their collaboration in this conference.

Additionally, we express our deep appreciation to the members of the Organizing Committee for their excellent teamwork and great effort in bringing success to this conference. Lastly, on behalf of the conference committee, we are sorry for any unexpected inconveniences you might have had during this two-day conference. Finally, we hope all participants enjoyed the conference and gained valuable knowledge.

Thank you very much

apt. Suryati MSc., Ph.D

Chairperson ICCSCP 2023



WELCOME MESSAGE FROM THE DEAN OF THE FACULTY OF PHARMACY UNIVERSITAS ANDALAS



Bismillahirrohmanirrahim

Assalamualaikum Wr. Wb.

In the name of the Almighty Allah and His Prophet, who imparted to us the lesson of life's purpose, I want to warmly greet everyone attending the International Conference on Contemporary Science and Clinical Pharmacy (ICCSCP) 2023, hosted by The Faculty of Pharmacy Universitas Andalas. The first ICCSCP was held in 2018, followed by virtual conferences in 2021 and 2022. This year, we are proud to present the fourth ICCSCP, which will also occur virtually. The theme of this international conference is **"An Integrative Discovery, Development and Awareness of Halal and Healthy Pharmaceutical, Cosmetics, Food Products and Care."**

Ladies and gentlemen,

Recently, a significant global movement has arisen to make better and more ethical choices about various aspects of life, including food, medicine, cosmetics, and personal hygiene. This movement has brought about essential changes in industries where health-conscious consumerism intersects with the need for products that adhere to religious values, especially the Halal concept. The Halal idea represents more than just adhering to religious doctrine; it embodies a commitment to morality and well-being. Products that receive Halal certification must adhere to strict requirements, ensuring they are of the highest quality and safe to consume. Consequently, integrating Halal values with health and wellness considerations creates a distinct and compelling niche in the market.

Given the current circumstances, it is urgent to investigate the complex relationship between Halal principles and various industries, including personal care, cosmetics, food products, and pharmaceuticals. Halal has evolved into a comprehensive paradigm prioritizing ethical sourcing, product quality, and safety beyond its religious associations. Our conference aims to explore the relationship between Halal principles and the pursuit of well-being, shedding light on the creative moves and thoughtful decisions that define these sectors. Keynote and invited speakers from Thailand, Malaysia, Japan, Brunei Darussalam, and Indonesia will be at ICCSCP 2023 on October 30-31, 2023. The presenters will discuss the latest developments in clinical pharmacy, pharmacology, pharmacoeconomics, natural products, and pharmacy regulations.

Over the next two days, we will be immersed in a whirlwind of discussions, presentations, and dialogues that promise to push the boundaries of our understanding. The insights gained, the

connections made, and the ideas shared within these walls will leave a lasting impact on our respective fields and the world at large.

I would like to give a brief overview of our organization to our esteemed guests and participants. The Department of Pharmacy, Faculty of Mathematics and Natural Sciences, has a long history and played a crucial role in establishing the Faculty of Pharmacy in 1964. In 2008, the Pharmacy Department was renamed the Pharmacy Faculty. The Master of Pharmacy Program started in 2002, while the Doctorate Program in Pharmacy began accepting students in 2019. Our Undergraduate, Pharmacist Professional, and Master's programs have all received excellent national accreditation, and the Doctoral program has received excellent accreditation. In 2020, the Pharmacy Undergraduate Program was recognized by the ASEAN University Network-Quality Assurance (AUN-QA). Our goal is to conduct research on medication development using natural materials, drug use, and drug safety in clinical practice and the community. We also collaborate with hospitals, government agencies, pharmaceutical companies, universities in Indonesia and abroad, and other organizations to enhance research, education, and community service initiatives. This year, on September 21, we celebrated the 59th anniversary of the establishment of Universitas Andalas' Faculty of Pharmacy, and this meeting is being held in honour of this occasion.

On behalf of the Faculty of Pharmacy at Universitas Andalas, I would like to express my gratitude to the speakers and participants of the ICCSCP 2023. I thank the committee for their hard work organizing this conference. Lastly, I want to acknowledge the Rector of Universitas Andalas for supporting this event.

May God bless us all.

Prof. apt. Fatma Sri Wahyuni, Ph.D.

Dean of Faculty of Pharmacy, Universitas Andalas



KEYNOTE SPEAKERS



**DR. IR. H.
AUDY JOINALDY,
S.PT., M.SC., M.M.,
IPM, ASEAN.ENG**

Deputy Governor, West Sumatra
Province, Indonesia

 www.audyjoinaldy.com

 @joinaldy

AREA OF EXPERTISE

- *Regulation*
- *Politics*
- *Business*

WORK EXPERIENCE



- *Deputy Governor, West Sumatra Province, Indonesia, 2021-present*
- *Lecturer at Bogor Agricultural Institute and Gadjah Mada University*
- *Chairman of Perbakin, West Sumatra*
- *Chairman of LPTQ, West Sumatra*
- *Commissioners and Directors of several companies in Indonesia*
- *Chairman of the Advisory Board of the Indonesian Doctoral Friendship Forum (FORSILADI) West Sumatra*

EDUCATION HISTORY



- *Bachelor of Animal Science from Bogor Agricultural University, 2005.*
- *Master of Science from Wageningen University, Netherlands, 2007.*
- *Master of Management from Hasanuddin University, Makassar, 2011.*
- *Engineering (Ir.) degree from Gadjah Mada University, 2019.*
- *Madya Profesional Engineer from the Indonesian Engineers Association, 2019*
- *ASEAN Engineering (ASEAN.Eng) from the ASEAN Federation Engineering Association (AFEO), 2009*
- *Doctoral studies at the School of Business, Bogor Agricultural University, 2021.*
- *Master of Political Science at Andalas University, 2021-present.*

AWARDS



- *Indonesian World Records Museum (MURI), Deputy Governor with the Most Academic Degrees*
- *The youngest Deputy Governor of West Sumatra in history, appointed by the President of the Republic of Indonesia*



ASSOC. PROF. DR. WINAI DAHLAN

Founding Director of The Halal Science Center, Chulalongkorn University, Thailand

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AREA OF EXPERTISE

- Halal Science and Analysis
- Halal Industry
- Halal Product

WORK EXPERIENCE



- *Founding Director, The Halal Science Center, Chulalongkorn University, 2004-present*
- *Lecturer, Chulalongkorn University, 1993-present*
- *Vice President, The Central Islamic Council of Thailand (CICOT), 2013-present*
- *Chairman, The Halal Standard Institute of Thailand (HSIT), 2014-present*
- *Member, Thailand Halal Task Force (Ministry of Agriculture and Cooperatives), 2022 - present*
- *Member, Committee of Muslim-friendly tourism promotion (Ministry of Tourism and Sports), 2022 - present*

EDUCATION HISTORY



- *B.Sc. Biochemistry, Faculty of Science, Chulalongkorn University, Bangkok, Thailand, 1976*
- *M.S. Nutrition, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, 1982*
- *Ph.D. Applied Medical Biology (grand distinction), Faculty of Medicine and Pharmacy, St-Pierre Hospital, Université Libre de Bruxelles, Brussels, Belgium, 1989*

AWARDS



Awards

- *The Award for The Continuous International Affirmation of Halal in The World from Agency for Halal Quality Certification, Sarajevo, Bosnia and Herzegovina, 2023*
- *The Public Sector Excellence Award (for E-Number), Office of Public Sector Development Commission, Office of Prime Minister, Bangkok, Thailand, 2020*
- *The Dushdi Mala Medal , 2008*

Honours

- *One of The 500 World's Most Influential Muslims for 14 consecutive years by the Royal Islamic Strategic Studies Centre.*



PROF. DR. IRWANDI JASWIR, M.SC

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Research and Training (INHART),
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AREA OF EXPERTISE

- *Food Chemistry and Biochemistry*
- *Halal Science and Authentication*
- *Food Quality and Safety*

WORK EXPERIENCE



- *Chairman, Korea-Inhart Halal Certification Authority*
- *Consultant, Halal Centre, Saudi Food and Drugs Authority (SFDA), Kingdom of Saudi Arabia*
- *Senior Consultant of Food Safety, Pure and Good Ltd, Singapore*
- *Consultant, Aladdin Group (Halal E-Commerce) Sdn Bhd. Kuala Lumpur, Malaysia*
- *Board Member, Haebara Pte Ltd (Halal Poultry), South Korea*
- *Board Member, Skinmatch Sdn Bhd (Halal Cosmetics), Kuala Lumpur*

EDUCATION HISTORY



- *Bachelor Degree (with honours) in Food Technology and Human Nutrition, Bogor Agriculture University, Indonesia, 1993*
- *Master of Science (M.Sc.) in Food Science and Biotechnology, Universiti Pertanian Malaysia, 1996*
- *Philosophy of Doctor (Ph.D) in Food Chemistry and Biochemistry, Universiti Putra Malaysia, 2000*
- *Ph.D Exchange Programme, Dept. of Food, Nutrition and Health, University of British Columbia, Canada, 1989*
- *Diploma in Islamic Revealed Knowledge, International Islamic University Malaysia. 2003*
- *Postdoctoral Fellowship in Lipid Biochemistry, National Food Research Institute, Tsukuba, Japan, 2006-2008*

AWARDS



- *King Faisal International Prize Laureate 2018 ('Nobel Prize of Muslim World')*
- *Indonesian Institute for Science (LIPI) Award 2019*
- *Habibie Award 2013 Recipient in Medicine and Biotechnology*
- *Islamic Product Innovation Award, 2016 & 2017*
- *Asia Pacific Young Scientist Award by Scopus in 2010*
- *Kedaireka Matching Fund Awardee, Kemdikbud Ristek, 2021*



PROF. DR. APT ERIZAL ZAINI, M.SI

Department Of Pharmaceutics,
Faculty Of Pharmacy, Universitas
Andalas, Indonesia

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AREA OF EXPERTISE

- *Pharmaceutical Technology*
- *Solid State Pharmaceutics*

WORK EXPERIENCE



- *Head of Pharmacy Doctoral Program, Faculty of Pharmacy, Andalas University*
- *Deputy Dean of the Faculty of Pharmacy, Andalas University*
- *Editor in Chief of Jurnal Sains Farmasi dan Klinis (JSFK)*
- *Editorial board of several national journals*

EDUCATION HISTORY



- *Bachelor degree, Pharmacy, Andalas University, 1997*
- *Master degree, Pharmaceutics, Bandung Institute of Technology, 2002*
- *Doctoral degree, Pharmaceutics, Bandung Institute of Technology, 2010*

REVIEWER/ASSESSOR EXPERIENCE



- *Reviewer of the Student Creativity Program by the Ministry of Education and Culture, Republic of Indonesia.*
- *Reviewer for research by the Ministry of Education and Culture, Republic of Indonesia*
- *Reviewer of several national and reputable international journals: Carbohydrate Polymer (Elsevier), Drug Development Industrial Pharmacy (Taylor Francis Group), ACS Omega (ACS Publications), Sains Malaysiana (UKM Malaysia), Indonesian Journal of Chemistry (UGM)*
- *National assessor of scientific journals*



PROF. HIROSHI KANZAKI, PH.D

Faculty of Graduate School of
Environmental, Life, Natural Science
& Technology, Okayama University,
Japan

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 +81-86-251-8297

AREA OF EXPERTISE

- *Enzyme Production*
- *Applied Biochemistry*
- *Fermentation*

WORK EXPERIENCE



- *Executive director (Vice President for International affairs), Okayama University, 2017 – 2018*
- *Dean, The Graduate School of Environmental & Life Science, Okayama University,*
- *President in of Okayama University Library, 2011-2013*
- *Dean, Faculty of Agriculture, Okayama University, 2007-2011*
- *Vice dean, Faculty of Agriculture, Okayama University, 2005-2007*

EDUCATION HISTORY



- *Faculty of Agriculture, Kyoto University, Awarded the degree of Bachelor of Agriculture*
- *Faculty of Agriculture, Kyoto University, Awarded the degree of Master of Agriculture*
- *Faculty of Agriculture, Kyoto University, Awarded the degree of Doctor of Agriculture*

RESEARCH EXPERIENCE



- *Professor, Okayama University working on 'search and production of useful bioactive compounds using cells or enzymes' , 2004-present*
- *Associate professor, Okayama University working on 'search and production of useful bioactive compounds using cells or enzymes' , 1993-2004*
- *Visiting Scientist in National Institute of Health, USA working on enzymology of tryptophan synthase, 1988-1989*
- *Assistant Professor working on 'search and production of useful bioactive compounds using cells or enzymes' , 1987-1993*
- *JSPS postdoctoral fellow at Faculty of Agriculture, Kyoto University, working with Professor Hideaki Yamada on 'enzymatic synthesis of useful compounds' , 1986-1987*



ASSOC. PROF. DR MOOHAMAD ROPANING SULONG

Halalan Thayyiban Research Centre (HTRC),
Universiti Islam Sultan Sharif Ali (Unissa),
Brunei Darussalam

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AREA OF EXPERTISE

- Enzyme Modification and Protein Engineering
- Microbial Biotechnology
- Molecular Biology
- Halal Sciences

WORK EXPERIENCE



- Associate Professor in Science and Halal Science at Halalan Thayyiban Research Centre, Universiti Islam Sultan Sharif Ali (Unissa), March 2023-present
- Director of Centre for Research and Industrial Linkages (CRIL), Universiti Selangor, Malaysia, 2020-2023
- Director of International Halal Institute (INSHA), Centre of Excellence, Universiti Selangor, Malaysia, 2018-2023
- University Representative, Malaysian Society for Biochemistry and Molecular Biology (MSBMB), 2020-2023
- Selangor Halal Industry Committee Member under Exco for Islamic Affairs, Consumers and Halal Industry, 2020-2023
- Internal Auditor (ISO 9001:2015 & 21001:2018 EOMS), Universiti Selangor, Malaysia, 2021-2023

EDUCATION HISTORY



- BSc. Microbiology in Al Azhar University, Cairo, Egypt, 1995
- MSc. Microbial Biotechnology in Universiti Putra Malaysia, Malaysia, 2006
- PhD. Enzyme Technology in Universiti Putra Malaysia, Malaysia, 2015

AWARDS



- Invention, Innovation & Design Exposition (Silver award), 2020
- Intellectual Research & Innovation Showcase (Bronze award), 2019
- Finalist at Tech Plan Demo Day in Malaysia, 2019
- Universiti Selangor Award as Excellent Researcher, 2018
- Best Oral Presenter at Thailand Halal Assembly, 2016
- Best Oral Presenter at Compendium of Unisel & Research Publications, 2012
- Al-Biruni Academic 2005 Award

WORK EXPERIENCE



- *Head of Center of Excellence, Institute of Halal Industry and Systems, Universitas Gadjah Mada.*
- *Lecturer in Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Universitas Gadjah Mada Yogyakarta*
- *Editor in Chief Indonesian Journal of Pharmacy (Q3-Scopus Indexed Journal)*
- *Guest editors and reviewers in several reputed journals.*

EDUCATION HISTORY



- *Bachelor degree at Pharmaceutical Sciences, Faculty of Pharmacy, Gadjah Mada University, Indonesia, 1998-2002*
- *Master degree at Pharmaceutical Sciences, Faculty of Pharmacy, Gadjah Mada University, Indonesia, 2004-2006*
- *Ph.D degree from Institute of Halal Product Reseach, Universiti Putra Malaysia, 2011*

AWARDS




- *Young Scientist Scopus Award on Sustainable Agriculture in 2014*
- *“Anugerah Kekayaan Intelektual Luar Biasa or AKIL” in the field of international publication from the Ministry of Research, Technology and Higher Education year 2014.*



PROF. DR. APT. ABDUL ROHMAN, SF, M.SI

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AREA OF EXPERTISE

- *Analysis of Halal Products*
- *Authentication*
- *Analytical Chemistry*

CONFERENCE SCHEDULE

CONFERENCE TIMETABLE

DAY 1: MONDAY, 30TH OCTOBER 2023

Time (GMT +7)	Agenda	Venue	PIC
07.30-08.00	Participant registration	Main room	Committee
08.00-08.45	Opening Ceremony Opening speech: <ul style="list-style-type: none">Committee chairpersonDean of Faculty of Pharmacy, Universitas Andalas	Main room	MC
08.45-09.00	Coffee break		
Session 1			
09.00-09.45	Plenary Lecture I: Ir Audy Joinaldy, S.Pt, M.M, IPM, ASEAN.Eng Deputy Governor of West Sumatra, Indonesia	Main room	Moderator: Prof. Dr. apt. Marlina, M.S
09.45-10.00	Q&A session		
10.00-10.45	Plenary Lecture II: Assoc. Prof. Dr. Winai Dahlan Founder Director of the Halal Science Center Chulalongkorn University, Thailand		
10.45-11.00	Q&A session		
11.00-11.45	Plenary Lecture III: Prof. Dr. Irwandi Jaswir, M.Sc Research Coordinator of Halal Industry Research Centre, IIUM, Malaysia		
11.45-12.00	Q&A session		
12.00-13.00	Lunch break		

CONFERENCE TIMETABLE

Time (GMT +7)	Agenda	Venue	PIC
Session 2 (Parallel)			
13.00-16.00	Parallel Session <ul style="list-style-type: none">• Invited Speaker• Oral Presentation	Breakout room	

DAY 2: TUESDAY, 31ST OCTOBER 2023

Time (GMT +7)	Agenda	Venue	PIC
07.30-08.00	Participant registration	Main room	Committee
Session 3			
08.00-08.45	Plenary Lecture IV: Prof. Dr. Erizal Zaini, M.Si Crystallography Researcher, Universitas Andalas, Indonesia	Main room	Moderator Prof. Dr. rer.nat. apt. Dian Handayani
08.45-09.00	Q&A session		
09.00-09.45	Plenary Lecture V: Prof. Hiroshi Kanzaki, Ph.D Natural Product Discovery Researcher, Okayama University, Japan		
09.45-10.00	Q&A session		

Session 4 (Parallel)			
10.00-12.00	Parallel Session <ul style="list-style-type: none">• Invited Speaker• Oral Presentation	Breakout room	
12.00-13.00	Lunch Break		

CONFERENCE TIMETABLE

Time (GMT +7)	Agenda	Venue	PIC
Session 5			
13.00-13.45	Plenary Lecture VII: Prof. Dr. apt. Abdul Rohman, SF, M.Si. Director of Institute for Halal Industry & System Universitas Gadjah Mada, Indonesia	Main room	Moderator Prof. Dr. apt. Almahdy, MS
13.45-14.30	Plenary Lecture VI: Assoc. Prof. Dr. Moohamad Ropaning Sulong Halalan Thayyiban Research Centre (HTRC), Universiti Islam Sultan Sharif Ali (Unissa), Brunei Darussalam		
14.30-15.15	Plenary Lecture VIII: Dr. Muhammad Aqil Irham, M.Si Head of Indonesian Halal Product Assurance Agency/BPJPH		
15.15-16.00	Q&A session		
16.00-16.30	Closing Ceremony Closing speech: <ul style="list-style-type: none">Vice Dean of Faculty of Pharmacy, Universitas Andalas	Main room	MC

PARALLEL SESSION SCHEDULE

DAY 1

Room 1

: Biology Pharmacy

Invited Speaker : Dr. apt. Nova Syafni, M.Farm

Moderator : Dr. apt. Dira Hefni, M.Sc

No	Time	Code	Name	Title
1	13.00-13.15	Invited Speaker	Dr. apt. Nova Syafni, M.Farm	Study on Natural Products from Sumatran Plants; Isolation and Bioactivities
2	13.15-13.25	OP-008	Musyirna Rahmah Nasution	Potential of Nipa (<i>Nypa Fruticans</i> Wurmb) Fruit Juice Supplemented in Kombucha Beverage as Antibacterial Agent
3	13.25-13.35	OP-019	Ayu Rahmawati	Antibacterial Potential Test And Phytochemical Screening Of Leaf Ethanol Extract Of Several Mangrove Species In Siak Regency, Riau Province Indonesia
4	13.35-13.45	OP-024	Noveri Rahmawati	Cytotoxic Fraction of <i>Uncaria Nervosa</i> Leaves and Its Cell Migration and Apoptosis Effect of Mcf-7 Cells
5	13.45-13.55	OP-026	Mega Yulia	Viability Study of Tapak Liman (<i>Elephantopus scaber</i> Linn) Leaves toward Raw 264.7 Cells
6	13.55-14.05	OP-027	Muhammad Alfian	Test of the physical stability and activity of hair growth tonic with cocoa bean extract in mice
7	14.05-14.15	OP-050	Siti Hamidatul 'Aliyah	Bioactivities of Leaves and Flower <i>Melastoma malabathricum</i> L extract as antioxidant and antibacterial agent
8	14.15-14.25	OP-066	Bina Lohita Sari	Total Flavonoid Content, Antioxidant Activity, and Urokinase Type Plasminogen Activator Inhibitor of <i>Cananga odorata</i> and <i>Lantana camara</i> Leaves Extract

DAY 1

Room 1

: Biology Pharmacy

Invited Speaker

: Dr. apt. Nova Syafni, M.Farm

Moderator

: Dr. apt. Dira Hefni, M.Sc

No	Time	Code	Name	Title
9	14.25-14.35	OP-071	Fahrauk Faramayuda	Extraction Time Effect On Active Compounds Levels In Cat Whiskers (<i>Orthosiphon Aristatus</i> (Blume) Miq.)
10	14.35-14.45	OP-099	Fathiyah Nurul Ashilah	Subacute Toxicity Study of Ethanol Extract of Noni Fruit (<i>Morinda citrifolia</i> L.) on Creatinine Clearance Levels in Male White Rats
11	14.45-14.55	OP-100	Annisa Zainuddin	Subacute Toxicity Test of Ethanol Extract of Noni Fruit (<i>Morinda citrifolia</i> L.) on Kidney Histology of Male White Rats
12	14.55-15.05	OP-101	Alicia Va Yanson	The Effects of Noni (<i>Morinda citrifolia</i> L.) Ethanol Extract on SGPT and SGOT Enzyme Levels of Male White Rat
13	15.05-15.15	OP-107	Eliza Arman	Combined Effect of Topical Application of Virgin Coconut Oil (VCO) and Black Cumin Oil (<i>Nigella Sativa</i>) on the Upregulation of VEGF Gene Expression and Wound Healing in Diabetic Ulcerated Rats
14	15.15-15.25	OP-108	Rina Herowati	Anti-arthritis Activity of <i>Zingiber officinale</i> Roscoe and <i>Imperata cylindrica</i> Rhizome Extract Combination
15	15.25-15.35	OP-124	Fitri Rachmaini	Purified Gambir (<i>Uncaria gambir</i> (Hunter) Roxb.) Attenuate Renal Function in Alloxan-Induced Diabetic Male Rats
16	15.35-15.45	OP-127	Amanda Zulfika Putri	Metabolite Profiling, Antibacterial, and Anti-Tyrosinase Activity of Temu Kunci (<i>Boesenbergia rotunda</i> (L.) Mansf.)
17	15.45-15.55	OP-137	Yulia Inri	Isolation of Antibacterial Compound from Endophytic Fungus <i>Aspergillus terreus</i> JMR4

DAY 1

Room 2 : Pharmaceutical Chemistry
Invited Speaker : Prof. Rahmana Emran Kartasasmita
Moderator : apt. Annisa Fauzana, M.Farm

No	Time	Code	Name	Title
1	13.00-13.15	Invited Speaker	Prof. Dr. rer. Nat. apt. Rahmana Emran Kartasasmita	Halality/Halalness Assurance in Drug Discovery Process
2	13.15-13.25	OP-004	Fitria Indah Permata Sari	Soy Souce Quality Mapping by Combination of UV-Vis Spectroscopy and Chemometric Analysis
3	13.25-13.35	OP-007	Dr. apt. Dewi Astriany, M.Si.	Expression and Characterization of Single-Chain Fragment Variable Antibody in <i>Escherichia coli</i> for Detection of Dengue Virus NS1 Antigen
4	13.35-13.45	OP-022	Kuni Zu'aimah Barikah	Effect of Quercetin and Avobenzone Concentration on Physical Characterization and In Vitro Activity of Sunscreen
5	13.45-13.55	OP-032	Fahrauk Faramayuda	HPLC Method Validation For Quantification Of Sinensetin In Cat Whiskers
6	13.55-14.05	OP-040	Ully chairunisa	Analysis of Physico-Chemical Properties, Target Potential of TGF β Keloid Cells (PDB ID: 1VJY and 3 TZM) and Toxicology of Pure Isolated Compounds from Natural Materials Using the In Silico Method
7	14.05-14.15	OP-042	Mainal Furqan	Unravelling The Interaction Between Garcinisidone-A And Her-2 Protein in Breast Cancer: A Computational Study
8	14.15-14.25	OP-043	Yori Yuliandra	Fighting Fosfomycin Resistance: In Silico Screening for FosA Inhibitors
9	14.25-14.35	OP-052	Rizky yulion putra	Characterization of Natural Product Compoud of <i>Melastoma malabathricum</i> with LC-MS/MS

DAY 1

Room 2 : Pharmaceutical Chemistry
Invited Speaker : Prof. Rahmana Emran Kartasasmita
Moderator : apt. Annisa Fauzana, M.Farm

No	Time	Code	Name	Title
10	14.35-14.45	OP-053	Jantje Wiliem Souhaly	Anticancer activity of <i>Piper retrofractum</i> targeting in Apoptosis Through Computational study
11	14.45-14.55	OP-057	Mashuri Yusuf, S.Si., M.Farm	Cytotoxic Activity And Phytochemical Screening Of Etanol Extract Of Bajakah Tampala (<i>Uncaria lanosa</i> Var. Ferrea (Blume) Ridsdale) On Breast Cancer Cell Lines MCF-7
12	14.55-15.05	OP-081	Dini Hanifa	Determination of Total Antioxidant and Phenolic Contents of Plant Extracts as Bioreducers in the Formation of Silver Nanoparticles
13	15.05-15.15	OP-083	Beta Herilla Sekti	Determining the SPF (Sun Protection Factor) Value of Jukut Pendul Ethanol Extract Using UV-Vis Spectrophotometry Method
14	15.15-15.25	OP-090	Muhammad Atha Hafizh Sismaya	Analysis of Apoptotic Cell Death On MCF7/HER2 Breast cancer Cell After Induction Of Rubraxanthone compound by Double Staining Method
15	15.25-15.35	OP-093	Adzra Yumna Raihan	Cytotoxic Study of Rubraxanthone on MCF-7/HER2 Breast Cancer Cells Using The Microtetrazolium Assay (MTT)
16	15.35-15.45	OP-103	Aldesra Fitri	Antibacterial Activity Test of Ethanol Extract of Lime Peel (<i>Citrus aurantifolia</i>) against <i>Staphylococcus aureus</i> , <i>Pseudomonas aeruginosa</i> and <i>Propionibacterium acnes</i>
17	15.45-15.55	OP-139	Diar Herawati	The Influence of Non-Covalent Bonding Between Antibiotics with NSAIDS (Non Steroidal Anti-Inflammatory Drugs) on the TG-DTA (Thermo Gravimetric-Differential Thermal Analysis) Profile

DAY 1

Room 3a : Clinical Pharmacy
Invited Speaker : Prof. Susi Ari Kristina, S.Farm., M.Kes
Moderator : apt. Dita Permatasari, M.Farm

No	Time	Code	Name	Title
1	13.00-13.15	Invited Speaker	Prof. Dr. apt. Susi Ari Kristina,	Pharmacists' provision and challenges of health promotion services towards non-communicable diseases in Indonesia
2	13.15-13.25	OP-003	Ari Yuniarto	The Profile of Antibiotic Use of COVID-19 Inpatients at Dr. Sitanala Hospital Tangerang in the Year 2021
3	13.25-13.35	OP-023	apt. Lusi Indriani, M.Farm.	Relationship Between Treatment Duration and Drug Regimen with Incidence of Side Effects in Drug-Resistant Tuberculosis (DR-TB) Patients at Pulmonary Hospital Bogor
4	13.35-13.45	OP-033	Mayang Aditya Ayuning Siwi	The Relationship between the Level of Knowledge about Traditional Medicine and the Demographic Characteristics of the Sumberuko Village Community, Wagir District, Malang Regency
5	13.45-13.55	OP-106	Husnawati	Knowledge and Attitude of Hypertension Patients towards Traditional Medicines: A Cross-sectional Study at Public Health Center, Siak, Riau
6	13.55-14.05	OP-038	Hidayah Karuniawati	Assessment of Antibiotics Sales in Shops and Grocery Stores in Boyolali, Indonesia
7	14.05-14.15	OP-056	apt. Yanuar As'hari Cahyaningrum, M.Pharm	Evaluation of Compliance with Good Drug Distribution Practices as a Quality Management System at Pharmaceutical Wholesalers in the Madiun Area
8	14.15-14.25	OP-062	Dr..Hansen Nasif. Apt., Sp.FRS	Study of Recommendation the Medication Options for Productive Cough Without Infection Symtoms for Self-Medication from Pharmacy Employees in Kuranji Disctrict, Padang City

DAY 1

Room 3a : Clinical Pharmacy
Invited Speaker : Prof. Susi Ari Kristina, S.Farm., M.Kes
Moderator : apt. Dita Permatasari, M.Farm

No	Time	Code	Name	Title
9	14.25-14.35	OP-065	Rosaria Ika Pratiwi	The Rationality of Antibiotic Use in Community-Acquired Pneumonia Inpatients
10	14.35-14.45	OP-079	Baha Udin	Cost-Effectiveness Analysis of Combination Salbutamol-Ipratrorium and Salbutamol Single in Patients Asthma of dr. Dradjat Prawiranegara Serang Hospital
11	14.45-14.55	OP-091	Nikmatul ikhrom eka jayani	The Effectiveness of Digital Pamphlets to Improve Herbal Knowledge of Herbal Drink Consumer
12	14.55-15.05	OP-096	apt. Fitri Andriani Fatimah, M.Pharm.Sci.	Analysis of the Cost Effectiveness of Monotherapy and Combination Antidiabetic Treatment in Covid-19 Inpatients Suffering from Type 2 Diabetes Mellitus at Panembahan Senopati Hospital, Bantul, Yogyakarta
13	15.05-15.15	OP-102	Hansen Nasif	Profile of Hand Sanitizers Sold Online As An Effort To Prevent Covid-19 Infection Through Assessment of Alcohol Content
14	15.15-15.25	OP-111	Eva Sartika Dasopang	Communication, Information, and Education Services Related to Adherence to Taking Medication for Patients with Type 2 Diabetes Mellitus at RSUP H. Adam Malik Medan
15	15.25-15.35	OP-114	Ivana Regita Viviani	Analysis of Pharmacists' Knowledge Level on Drug Management with Drug Availability Level in Community Health Centers in Padang City
16	15.35-15.45	OP-115	Annisa Rizkiia Z	Analysis of Patient Satisfaction with Pharmaceutical Services at Reksodiwiryu Hospital in Padang City
17	15.45-15.55	OP-116	Risa Susanti	Correlation Between Polypharmacy and Potential Drug Interaction in ICU Patients at Dr. Slamet Garut Hospital

DAY 1

Room 3b : Pharmacology
Invited Speaker : Prof. Susi Ari Kristina, S.Farm., M.Kes
Moderator : apt. Yoneta Srangenge, M.Sc

No	Time	Code	Name	Title
1	13.00-13.15 (room 3.a)	Invited Speaker	Prof. Dr. apt. Susi Ari Kristina, S.Farm., M.Kes	Pharmacists' provision and challenges of health promotion services towards non-communicable diseases in Indonesia
2	13.15-13.25	OP-006	Sri Oktavia	Anticancer Activity of Piperine on Cell Proliferation, p53 and hTERT expression in HeLa Cells
3	13.25-13.35	OP-010	Prof. Dr. apt. Dyah Aryani Perwitasari, M.Si., Ph.D.	Liver Functions Profile of Tuberculosis Patients in Indonesia During Antituberculosis Treatment
4	13.35-13.45	OP-013	apt. Ifora, M. Farm	Combinational Effects of Asam Kandis (<i>Garcinia cowa</i> Roxb.) Leaves Ethanolic Extract and Doxorubicin on T47D Breast Cancer Cell
5	13.45-13.55	OP-018	Nursyafni	Anti-inflammatory activity of An Ethanol Extract of Pucuk Merah (<i>Syzygium myrtifolium</i> walp.) in vivo
6	13.55-14.05	OP-020	Lucia Hendriati	The Effectivity of Ethanol Extract of <i>Smallanthus sonchifolius</i> Patch on Microscopic Parameters of Gangrene Wounds of White Rats
7	14.05-14.15	OP-021	Armenia	Rosella Flower (<i>Hibiscus sabdariffa</i> . L) as an Antidiabetes: Ethyl Asetate Fraction Effect to Plasma MDA, TNF-A, Platelet and Bleeding Time on Diabetic Rats
8	14.15-14.25	OP-031	Tri Fitri Yana Utami	Effect of Morinda Fruit Extract (<i>Morinda citrifolia</i> Linn) on Ulcerative Colitis Disease Activity Index and Colon Lesion Macrocopy in Acetic Acid-Induced Mice

DAY 1

Room 3b : Pharmacology
Invited Speaker : Prof. Susi Ari Kristina, S.Farm., M.Kes
Moderator : apt. Yoneta Srangenge, M.Sc

No	Time	Code	Name	Title
9	14.25-14.35	OP-034	Aprilita Rina Yanti Eff	Unraveling the Potential Benefit of Indonesian Jamu in Metabolic Syndrome via Antihypertensive and Antioxidant Activity in Rat- Induced Fructose 10%
10	14.35-14.45	OP-047	Netty Suharti	Effect of Ethyl Acetate Fraction of Rosella Petals (<i>Hibiscus sabdariffa</i> L.) to The Blood Sugar and Fat on White Male Diabetic Rats
11	14.45-14.55	OP-054	Fenny Khairunnisa	Anti-Diabetic Potential and Histopathology Change in the Pancreas of Male White Mice Induced-Alloxan From Three Variety of Green Coffee Beans
12	14.55-15.05	OP-063	Herlina	Standardization and Antidiarrheal Activity of Ethanol Fraction of Melinjo Leaves (<i>Gnetum gnemon</i> L. (Linn.)) on Male White Rats Wistar Strain in Salmonella typhi Bacteria Induced
13	15.05-15.15	OP-068	Dr.apr.Ifmaily, S.Si.,M.Kes	The Effect of Arumanis Mango Rind (<i>Mangifera indica</i> L) Extract as Antidiabetic in Rats Model
14	15.15-15.25	OP-078	Adinny Julmiza	Activity of Pegagan Embun Extract (<i>Hydrocotyle sibthorpioides</i> Lam.) in Capsule Dosage Form to SGPT and SGOT Levels in Humans
15	15.25-15.35	OP-087	Fanny Dita Zhafirah	Effect of Cowanin on Inhibition of Migration of MCF-7/HER2 Breast Cancer Cells by Scratch Wound Healing Method
16	15.35-15.45	OP-089	Idfi Adlina	Effect of Rubrasanton Compounds on Inhibition of migration of MCF-7/HER2 Breast Cancer Cells by the Scratch Wound Healing Method
17	15.45-15.55	OP-098	Nola Florida	Subacute Toxicity Study of Moringa Leaves Extract (<i>Moringa oleifera</i> Lam.) on Creatinine Clearance and AST Levels of Male White Rat

DAY 1

Room 4 : Halal Research/Biology Pharmacy
Invited Speaker : Assoc. Prof. Dr. Betania Kartika, M.A
Moderator : apt. Rahmad Abdillah, M.Si

No	Time	Code	Name	Title
1	13.00-13.15	Invited Speaker	Betania Kartika	Muslim Friendly Medical Tourism; Complementary Medicines and Tibbun Nabawy Practices
2	13.15-13.25	OP-016	apt. Meilinda Mustika	Antioxidant Activities Of Ethanol Extracts, N-Hexane Fractions, Ethyl Acetate Fractions, and Water Fractions From Five Varieties of <i>Ficus carica</i> Leaves
3	13.25-13.35	OP-028	apt., Yulianis	Antibacterial Activity of Fungal Endophytes Isolated from <i>Cyathea contaminans</i> (Hook) Copel
4	13.35-13.45	OP-029	Dwi Lestari	Rapid Detection of Rat Meat Adulteration in Beef Sausages Using FTIR-ATR Spectroscopy and Chemometrics for Halal Authentication
5	13.45-13.55	OP-046	Desi Eka Putri	Rubraxanthon-Mediated Modulation of Cyclin D1 Protein Expression in MCF-7/HER2 Breast Cancer Cell Line: A Western Blot Analysis
6	13.55-14.05	OP-048	Fefpi Nur Afnifitri W.	Xylose Production from Xylan Onggok Through Fermentation of <i>Bacillus subtilis</i> and <i>Penicillium janczewskii</i>
7	14.05-14.15	OP-051	Santi Perawati	Cytotoxic Activity of Mikania Species (<i>Mikania micrantha</i> Kunth and <i>Mikania cordata</i> (Burm. F) B.L.Rob) Against MCF-7 Breast Cancer Cells Using the MTS Assay
8	14.15-14.25	OP-060	Irene Puspa Dewi	<i>Curcuma aeruginosa</i> Roxb. extract inhibits the secretion of proinflammatory cytokines on Raw 264.7 macrophages
9	14.25-14.35	OP-061	Ruri Putri Mariska	Sunscreen Activity of UV-B Absorption of the n-Butanol Fraction and the Spray Gel Preparation of Senduduk Leaves (<i>Melastoma malabathricum</i> L.)

DAY 1

Room 4 : Halal Research/Biology Pharmacy
Invited Speaker : Assoc. Prof. Dr. Betania Kartika, M.A
Moderator : apt. Rahmad Abdillah, M.Si

No	Time	Code	Name	Title
10	14.35-14.45	OP-072	Dwisari Dillasamola	Study of Active Isolated Compounds from Sungkai Leaf (<i>Peronema canescens</i> Jack) as Immunostimulant from Exposure of the Sars-Cov-2 Virus Antigen to Natural Killer Cells
11	14.45-14.55	OP-080	Ari Widayanti	Antioxidant Activity of Fractionated Mangosteen Peel Extract (<i>Garcinia mangostana</i>)
12	14.55-15.05	OP-082	Triswanto Sentat	Development and Validation of a Bioanalytical Method for Therapeutic Drug Monitoring of Amikacin in Human Plasma Using Ultra Performance Liquid Chromatography–Tandem Mass Spectrometry
13	15.05-15.15	OP-095	Riskana Soraya Putri	Analysis of Turmeric (<i>Curcuma longa</i> Linn) Essential Oil from Different Growing Locations Using FTIR/GC-MS Spectroscopy Coupled to Chemometrics and Its Wound Healing Activities
14	15.15-15.25	OP-097	Sherly Handayani	Analysis of Apoptotic Cell Death on MCF-7/HER2 Breast Cancer Cell After Being Treated by Cowanin Compound Using Double Staining Method
15	15.25-15.35	OP-112	Muhammad Azhari	Antimycobacterial Properties of Ethyl Acetate Extracts of Marine-Derived <i>Aspergillus ostianus</i> and <i>Aspergillus flavus</i>
16	15.35-15.45	OP-121	Rismah Fadillah	Soxhlet Extraction and FT-IR Spectroscopy Coupled to Chemometrics: Authenticating Beef and Pork Rendang
17	15.45-15.55	OP-135	Sinta Ratna Dewi	Factors Associated With Treatment Adherence Among Hypertensive Patients In Samarinda City Hospital : A Cross-Sectional Study

DAY 1

Room 5 : Pharmaceutical Technology
Invited Speaker : Prof. Dr. apt. Henny Lucida
Moderator : apt. Adhitya Jessica, M.Si

No	Time	Code	Name	Title
1	13.00-13.15	Invited Speaker	Prof. Dr. apt. Henny Lucida	Nanophytosome: A Promising Carrier for Phytocosmeceuticals & Phytopharmaceuticals
2	13.15-13.25	OP-002	Viviane Annisa	A novel formulation of ketoconazole entrapped in alginate with anionic polymer beads for solubility enhancement: Preparation and characterization
3	13.25-13.35	OP-014	Nurbaiti	Formulation and physical stability of hair tonic ethanol extract of Katuk Leaves (<i>Sauropus androgynous</i> (L.) Merr)
4	13.35-13.45	OP-015	apt. Eka Siswanto Syamsul, S.Farm,M.Sc	Formulation and Evaluation of Nanoemulgel from <i>Sonneratia caseolaris</i> Leaf Extract
5	13.45-13.55	OP-025	Sudrajat Sugiharta	Optimization of Collagen Extraction Conditions from Milkfish (<i>Chanos chanos</i>) Scale as an Emulsifier
6	13.55-14.05	OP-030	Nola Rahmadasm	Preparation of Liquid Crystal from Multicomponent Crystal of Usnic Acid and N-Methyl-D-Glucamine for Transdermal Drug Delivery System
7	14.05-14.15	OP-035	Eka Desnita	Roll On anti inflammatory esesnsial oil Basil Leave (<i>Ocimum sanctum.L</i>)
8	14.15-14.25	OP-039	Nori Wirahmi	Effect of Oil Phase in Self Emulsifying System Nanoemulsion Formulation on Particle Size using PSA Malvern Mastersizer
9	14.25-14.35	OP-059	apt. Erni Rustiani, M.Farm.	Tablet Formulation Mixed of Papaya Leaf (<i>Carica papaya</i>) and Cinnamon Bark (<i>Cinnamomum burmanii</i>) Extracts with Variation Concentrations of PVP K-30 as a Binder

DAY 1

Room 5 : Pharmaceutical Technology
Invited Speaker : Prof. Dr. apt. Henny Lucida
Moderator : apt. Adhitya Jessica, M.Si

No	Time	Code	Name	Title
10	14.35-14.45	OP-064	apt. Uce Lestari, S.Farm, M.Farm	Determination of Sun Protection Factor (SPF) Value and Screening Phytochemical of Extract Ethanol Leaf Surian (<i>Toona sinensis</i>)
11	14.45-14.55	OP-074	Hafizhatul Akrami	Formulation of Anti-Blackhead Rubber Mask from Purified Gambier (<i>Uncaria gambir</i> [Hunter] Roxb.)
12	14.55-15.05	OP-077	Raudhatul Fadhillah	Encapsulation of Phase Change Material Into Cellulose As a Fever Compress
13	15.05-15.15	OP-086	Lili Fitriani	Preparation of Spray Dried Multicomponent Crystals of Trimethoprim-Mandelic Acid and Its Physicochemical Characterization
14	15.15-15.25	OP-094	Karina Citra Rani	Development and Characterization of Surface Solid Dispersion <i>Moringa oleifera</i> Leaf Extract Microcrystalline Cellulose by Co-Grinding Method
15	15.25-15.35	OP-122	Uswatul Hasanah	Tenoxicam-Tromethamine Multicomponent Crystal: Physicochemical Characteristics, Solubility, and Dissolution Evaluation
16	15.35-15.45	OP-133	Sari Meisyayati	Physical Characteristics and Release Profile of <i>Centella asiatica</i> /Honey/ κ -Carrageenan-Based Hydrogel Film to Promote Diabetic Foot Ulcer Management
17	15.45-15.55	OP-140	Intan Meisi	Effect of Sonication on Viscosity And Flow Properties of Liquid Crystal Collagen From Snakehead Fish (<i>Channa striata</i>)

DAY 2

Room 1 : Biology Pharmacy/Pharmacology
Invited Speaker : Dr. Fadzureena Jamaludin
Moderator : apt. Yori Yuliandra, M.Farm., Ph.D

No	Time	Code	Name	Title
1	10.00-10.15	Invited Speaker	Dr. Fadzureena Jamaludin	Quality development of traditional herbs, preparations and herbal products: FRIM's experience
2	10.15-10.25	OP-012	Adriani Susanty	Apoptosis Induction Activity of <i>Voacanga foetida</i> (Blume) Rolfe Bark Isolate Compounds Against T47D Breast Cancer Cells
3	10.25-10.35	OP-041	Ayu Amelia Putri, S.Farm	The Effect of Catechins from Purified Gambier (<i>Uncaria gambir</i> Roxb.) and Vitamin C on Malondialdehyde (MDA) Levels of Male White Mice After Physical Activity
4	10.35-10.45	OP-058	Lia Mardiana	Phytochemical Screening And Antioxidant Activity Test of Lupun Root (<i>Poikilospermum suaveolens</i> (Blume) Merr) from South of Borneo
5	10.45-10.55	OP-085	Aried Eriadi	Isolation of Endophytic Fungi and Antimicrobial Activity Test of Gambier Plants (<i>Uncaria gambier</i> (Hunter) Roxb)
6	10.55-11.05	OP-113	Risda Hayati	Chemopreventive Potential of N-Hexane Fraction of Kebiul Seeds (<i>Caesalpinia bonduc</i> (L) Roxb.) Bengkulu on Chorioallantoic Membranes Induced by bFGF
7	11.05-11.15	OP-126	Dean Pavvelling	Metabolite Profiling and Antioxidant Activities of Lunggo (<i>Citrus medica</i> L.) Peels and Leaves Essential Oils
8	11.15-11.25	OP-129	Joyce Artha Roslina Siregar	The Teratogenic Effect of Diethylene Glycol (DEG) on Fetus Morphology of White Mice (<i>Mus musculus</i> L.)
9	11.25-11.35	OP-136	Fahira Annisa Fitri	Subacute Toxicity Test Of Ethanol Extract Of Noni Fruit (<i>Morinda citrifolia</i> L.) On Liver Histology Of Male White Rats

DAY 2

Room 2 : Pharmaceutical Chemistry
Invited Speaker : Prof. Dr. apt. Marlina, MS
Moderator : apt. Azhoma Gumala, M.Farm

No	Time	Code	Name	Title
1	10.00-10.15	Invited Speaker	Prof. Dr. apt. Marlina, MS	Activity Test of Antibacterial Mesenchymal Stem Cell Secretome Against <i>Staphylococcus aureus</i> Isolated from Diabetic Foot Ulcer Patients
2	10.15-10.25	OP-036	Rahmad Abdillah	Antimicrobial Activities Screening of Endophytic Fungi Isolated from <i>Graptophyllum pictum</i> L. Griff.
3	10.25-10.35	OP-055	Dira Hefni	Effect of Cowanin on Cyclin D1 Expression in MCF-7/HER2 Breast Cancer Cells
4	10.35-10.45	OP-067	Armita Harahap	Evaluation of the Anti-Tyrosinase-Anti-Aging Potential and Metabolite Profiling from the Bioactive Fraction of Corn Cob (<i>Zea mays</i> L.)
5	10.45-10.55	OP-070	Annisa Fauzana	In Silico Analysis of Physico-chemical Properties, Target Potential and Anti-inflammation Activity of Tinocrisposid
6	10.55-11.05	OP-088	Angelicha Maysya Nahda	Effect of Cowanin Compounds on Cyclin D1 Protein Expression in MCF-7/HER2 Breast Cancer Cells Using Western Blot Method
7	11.05-11.15	OP-119	Nurrizka Kurniawati	In Silico Study of Analog Aloin on Human Serum Albumin Protein as an Antiglycation Agent in Diabetes Mellitus
8	11.15-11.25	OP-120	Fendi Yoga Wardana	Antioxidant Activities of Extract Kale (<i>Brassica oleracea</i> var. <i>sabellica</i>) Leaves
9	11.25-11.35	OP-123	Purnawan Pontana Putra	Exploring the Pharmacoinformatics Potential of <i>Morus macroura</i> Compounds for Drug Development
10	11.35-11.45	OP-128	Sary Rahma Dewiana	Unraveling the Wound Healing Potential of White Turmeric (<i>Curcuma Zedoaria</i> Rosc) Essential Oil from Various Regions in West Sumatera Using FT-IR/GC-MS Spectroscopy in Combination with Chemometric Analysis

DAY 2

Room 3 : Clinical Pharmacy
Invited Speaker : Dr. apt. Yelly Oktavia Sari
Moderator : apt. Fitri Rachmaini, M.Si

No	Time	Code	Name	Title
1	10.00-10.15	Invited Speaker	Dr. apt. Yelly Oktavia Sari	Parenteral Nutrition And Compatibility Issues
2	10.15-10.25	OP-009	Dian Febiana	Evaluating Economic Outcomes: Single-Use Aspirin vs. Aspirin-Clopidogrel in Ischemic Stroke Patients Based on Barthel Index Scores at RSUP Dr. M. Djamil Padang
3	10.25-10.35	OP-017	Rabiul Fajri	The Impact Of Diuretic Therapy To The Clinical Outcome On Patients Congestive Heart Failure With Or Without Hypoalbuminemia In DR. M. Djamil Hospital Padang
4	10.35-10.45	OP-084	Resna Rerita	Assessing Cost and Utility of Glimepiride as An Add-on to Metformin Use in Diabetic Patients
5	10.45-10.55	OP-104	R.F.X Premihadi Putra	Evaluation of Drug Management and Repair Strategy with Hanlon Method in the Installation of Pharmacy Hospital Level IV Madiun Year 2019
6	10.55-11.05	OP-105	EUGENIA SHEPANY	A Study of The Potential Drug-Drug Interactions of Antidiabetic Drugs Based on Literature in Geriatric Patients with Type 2 Diabetes Mellitus at RSUP Dr. M. Djamil Padang
7	11.05-11.15	OP-037	Dedy Almasdy	Self-Medication Pattern among Customers in a Community Pharmacy
8	11.15-11.25	OP-109	Nur Alima Husna	A Study of Potential Drug-Drug Interactions of Cardiovascular Drugs Based on Literature in Geriatric Patients With Congestive Heart Failure at Dr. M. Djamil Padang Hospital

DAY 2

Room 4 : Halal Research/Clinical Pharmacy
Invited Speaker: Dr. apt. Suryati, M.Sc
Moderator : apt. Dini Hanifa, M.Farm

No	Time	Code	Name	Title
1	10.00-10.15	Invited Speaker	Dr. apt. Suryati, M.Sc	Essential Oils from Selected Zingiberaceae Rhizomes as Halal Antimicrobial and Wound Healing Agents
2	10.15-10.25	OP-005	Najmiatul Fitria	Decreasing Cost Burden of Type 2 Diabetes Mellitus Using Metformin-Glimepiride Combination on 2-hour Post-Prandial Blood Glucose
3	10.25-10.35	OP-045	Wirnawati	Application of FTIR Spectroscopy and Chemometrics on Beef Meatballs Adulterated with Dog Meat for Halal Authentication
4	10.35-10.45	OP-069	Hafid Syahputra	Identification of Lard on Processed Products in Medan City Using UV-Spectrophotometer with Linear Discriminant Analysis and Principal Component Analysis Methods
5	10.45-10.55	OP-110	Yoneta Srangenge	Rationalizing Oral Analgesic Administration: An Investigation in Primary Healthcare
6	10.55-11.05	OP-118	Almahdy	Balancing Act: Investigating the Impact of Purified Gambir and Vitamin C on AST Levels
7	11.05-11.15	OP-125	Dedy Almasdy	Pharmacist's Response to Signs and Symptoms of Diseases in the Community Pharmacy
8	11.15-11.25	OP-130	Nabila Al Rizka	Cost-Utility Analysis of Amlodipine and Candesartan Combination in Hypertension Patients in Andalas University Hospital
9	11.25-11.35	OP-131	Genialita Fadhila	Correlation between Family Support and Health Professional Education on Tuberculosis Patient Compliance at Public Health Centers Tasikmalaya

DAY 2

Room 5 : Pharmaceutical Technology
Invited Speaker : Prof. apt. Taofik Rusdiana, M.Si., Ph.D
Moderator : apt. Lili Fitriani, M.PharmSc

No	Time	Code	Name	Title
1	10.00-10.15	Invited Speaker	Prof. apt. Taofik Rusdiana, M.Si., Ph.D	Current Drug Development Involving BDDCS Strategy and Pharmacogenomic Approach
2	10.15-10.25	OP-011	Rahmah Elfiyani	Garlic Extract Phytosome: Preparation and Physical Stability
3	10.25-10.35	OP-049	Dina Permata Wijaya	Formulation of Nanoparticle containing Kenikir Leaves Extract (<i>Cosmos caudatus</i> Kunth.) and Antidiabetic Activity in Rats
4	10.35-10.45	OP-073	Azhoma Gumala	Microencapsulation Bisoprolol Fumarate with Eudragit E PO by Solvent Evaporation Method
5	10.45-10.55	OP-092	apt. Yahdian Rasyadi, M. Farm	Kasturi Orange Peel (<i>Citrus microcarpa</i> Bunge) Essential Oil: Chemical Profile, Formulation as Roll On Aromatherapy and Its Evaluation
6	10.55-11.05	OP-117	Adhitya Jessica	Increased Dissolution Rate of Aceclofenac by Formation of Multicomponent Crystals with L- Glutamine
7	11.05-11.15	OP-132	Salman Umar	Bromelain Granules Formulation and Evaluation Using Factorial Design
8	11.15-11.25	OP-134	Pramulani Mulya Lestari	Development of Nanovesicular Systems For Transdermal Delivery of Atorvastatin Calcium
9	11.25-11.35	OP-138	Lidia	Enhanced Antioxidant Effect of <i>Peperomia pellucida</i> Extract Formulated in Pickering Nanoemulsion

ORAL PRESENTER'S ABSTRACT

EXPRESSION AND CHARACTERIZATION OF SINGLE-CHAIN FRAGMENT VARIABLE ANTIBODY IN ESCHERICHIA COLI FOR DETECTION OF DENGUE VIRUS NS1 ANTIGEN

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ABSTRACT

Dengue fever is still a major health concern in tropical and subtropical regions around the world. To give improved treatment, early detection and effective therapy should be created. To confirm dengue infection, single-chain Fragment variable (scFv) antibodies can be utilised as a component of the diagnostic technique. There have been reports of scFv activity with high affinity to the NS1 dengue virus antigen. In the previous study, we constructed and expressed a vector carrying the anti-NS1 scFv gene. The recombinant proteins were successfully produced in the *E. coli* BL21(DE3) system in the Luria Bertani medium using a 0.5 mM final concentration of IPTG induction. The result showed that scFv found as a approximately 35 kDa protein characterised by SDS-PAGE method. It can be concluded that the soluble scFv anti-NS1 obtained can be a suitable candidate for the development of a diagnostic kit component for dengue disease.

Keywords: *scFv, NS1 antigen, dengue virus, expression, E. coli*

Supporting Agencies : Source of research funding by Ministry of Research, Technology and Higher Education of the Republic of Indonesia and Indonesian School of Pharmacy.

Indexing : Pharmaceutical Chemistry and Biotechnology



Expression and Characterization of Single-chain Fragment Variable Antibody in *Escherichia coli* for Detection of Dengue Virus NS1 Antigen

Dewi Astriany, Umi Baroroh, Taufik Ramdani Tohari, Syarif Hamdani



ICCSCP 2023

"International Conference on Contemporary Science and Clinical Pharmacy 2023"

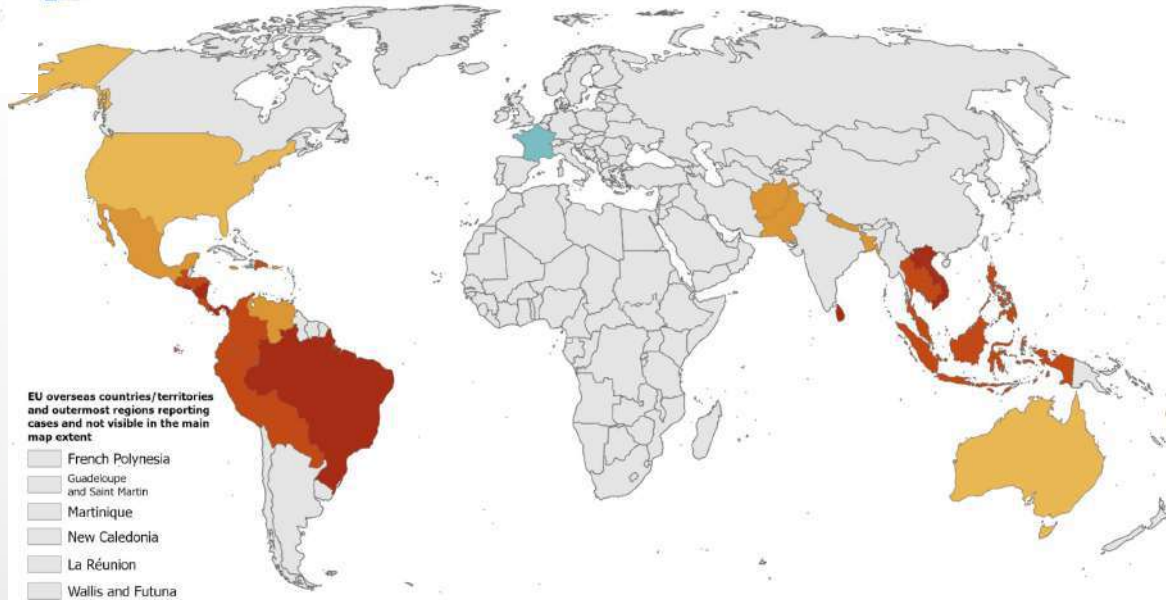
OUTLINE



INTRODUCTION



3-month dengue case notification rate per 100 000, June-August 2022



EU overseas countries/territories and outermost regions reporting cases and not visible in the main map extent:

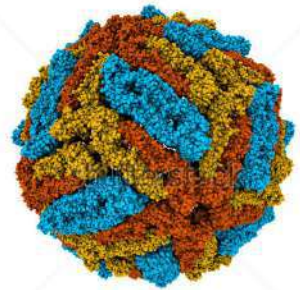
- French Polynesia
- Guadeloupe and Saint Martin
- Martinique
- New Caledonia
- La Réunion
- Wallis and Futuna

Notification rate per 100 000 population

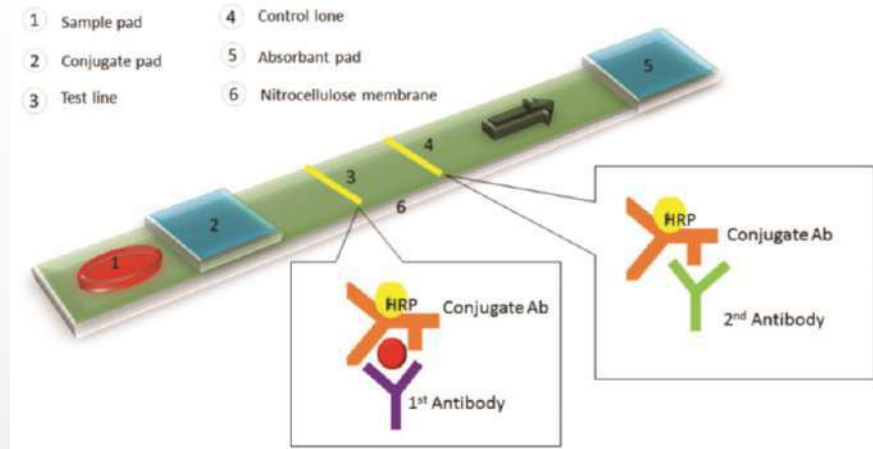


Administrative boundaries: © EuroGeographics. The designations employed and the presentation of material on the map do not imply the expression of any opinion whatsoever on the part of the European Union concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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METHODS

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graph LR; M[METHODS] --- S1[01 ScFv DENV Gene Construction]; M --- S2[02 Characterization of ScFv Plasmid]; M --- S3[03 Determination of Gene ScFv]; M --- S4[04 Expression of Gene ScFv]; M --- S5[05 Characterization of ScFv Protein];
```

01

ScFv DENV Gene
Construction

02

Characterization of
ScFv Plasmid

03

Determination of
Gene ScFv

04

Expression of Gene ScFv

05

Characterization of
ScFv Protein

01

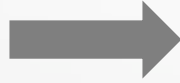
ScFv DENV Gene Construction

Sequence of ScFv : VL-linker-VH-BAD-polihistidin (331 AA)

```
MDFQVQIFSLLISASVIMSRGQIVLTQSPAIMTASLGERVTMTCTASSSVSSSYLHWYQQK  
PGSSPKLWIYSTSNLASGVPARFSGSGSGTSYSLTISSMEAEDAATYYCHQYHRSPYTFGG  
GTKLEIKGGGGSGGGGSGGGGSGGGGSGGGGSMEWSWIFLFLLSGTAGVHSEVQLQQSG  
PELVKPGASVKMSCKASGYTFTSYVMHWVKQKPGQGLEWIGYLNPNYNDDTKYNEKFK  
GKATLTSDKSSSTAYMELSSLTSEDSAVYYCAYGPPYALDYWGQGTSVTVSSSPSTPPTPSP  
STPPASGGLNDIFEAQKIEWHEGSSKYKYHHHHHH
```

Construction of
scFv

ScFv
BamHI & NdeI
pET-21b(+)

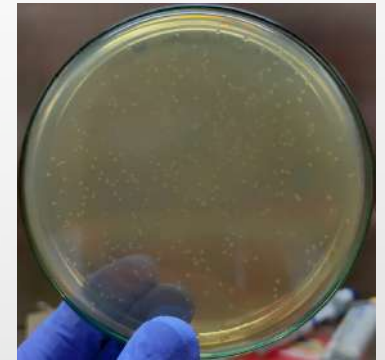


Competent Cell

E. coli BL21-B(DE3)



Transformed
E. coli



Culture

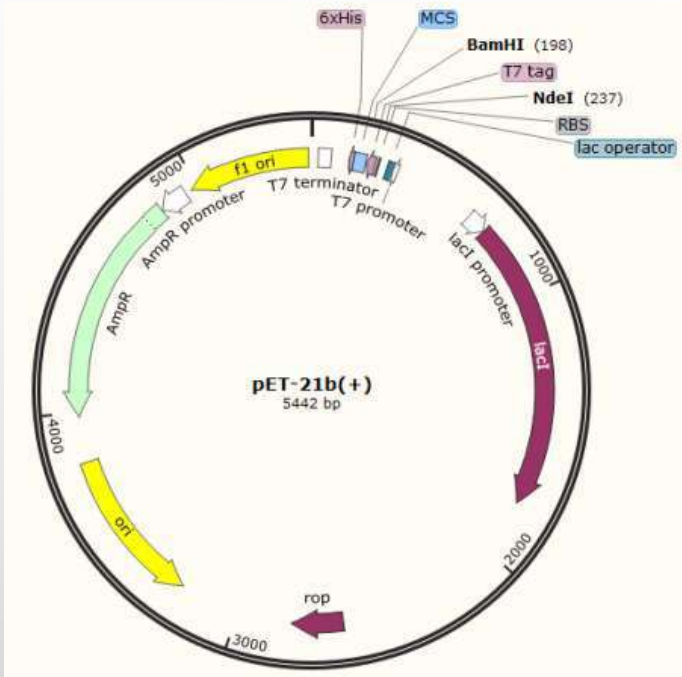


Plasmid

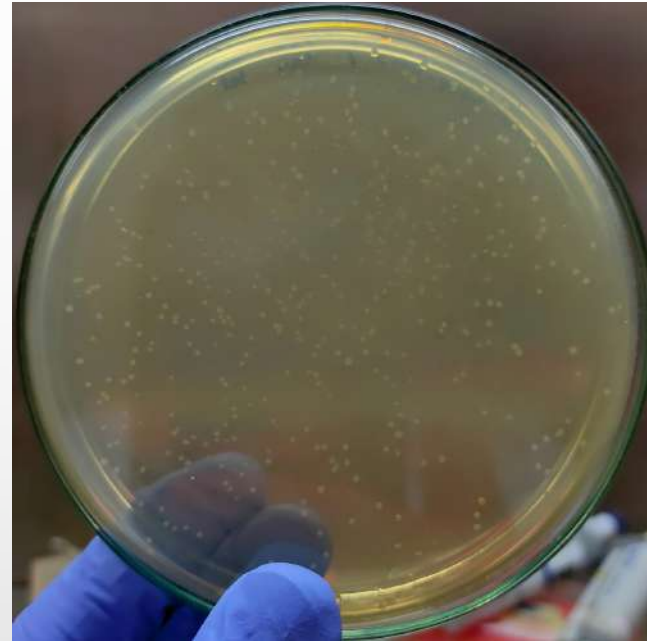


02

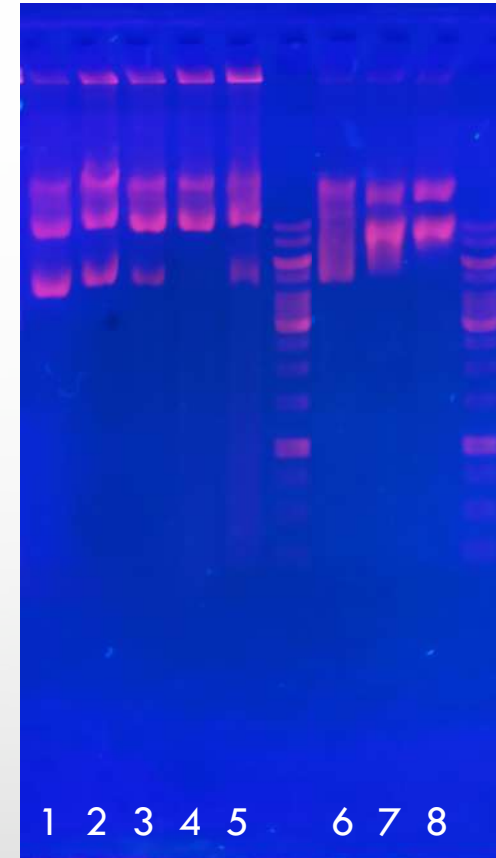
Characterization of ScFv Plasmid



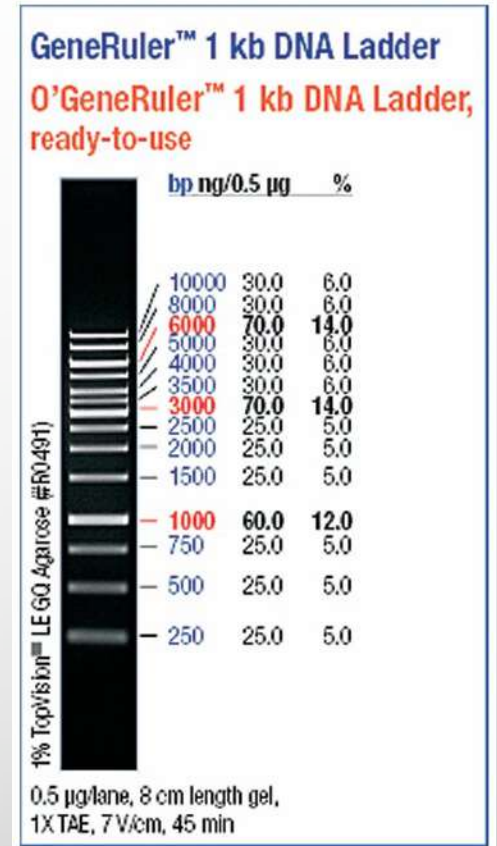
pET21b-DENV is 6447 bp
(the gen 1005 bp + the plasmid 5442 bp)



E. coli BL21-B(DE3) pET-21b(+)-
DENV Transformant



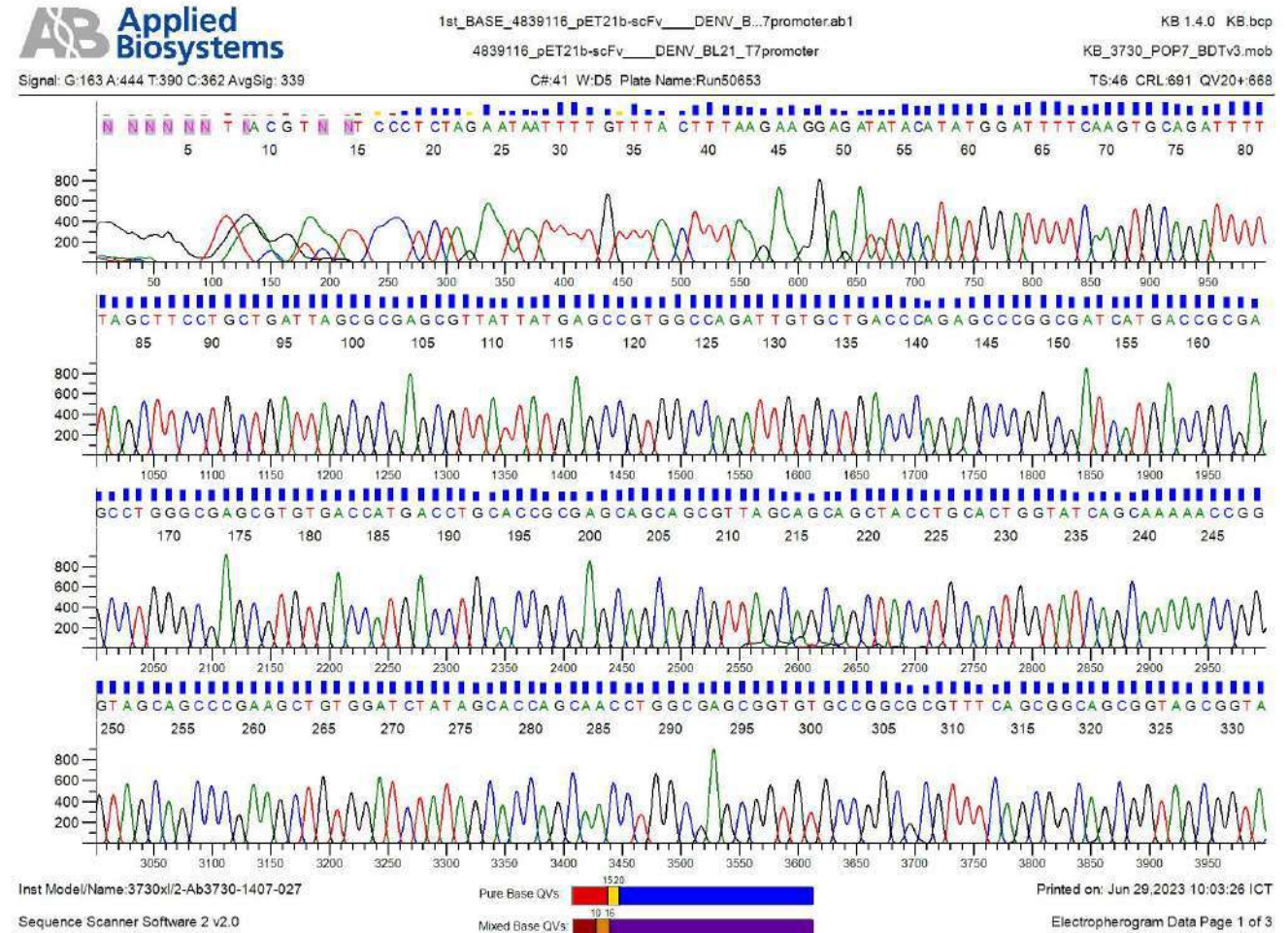
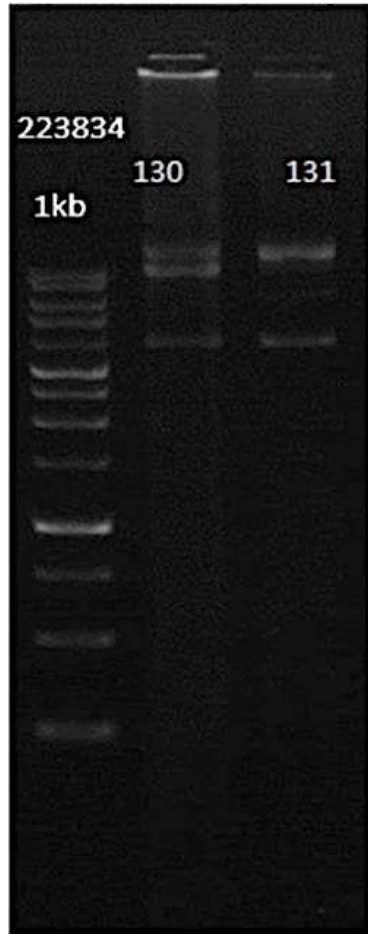
E. coli BL21(DE3)-hosted (6) Colony-1 36,7ng/ μ L; (7) Colony-2 36,1ng/ μ L; (8) Colony-3 24,3ng/ μ L



03

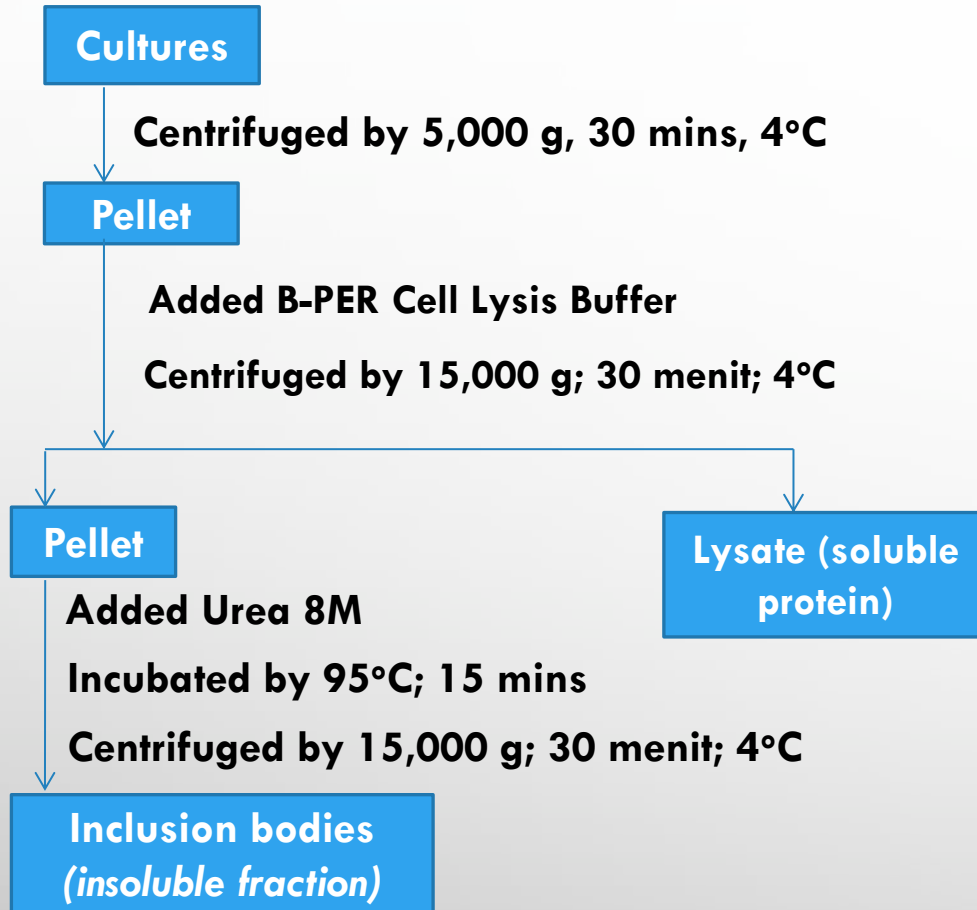
Determination of Gene ScFv

- Sanger Sequencing
- T7 Promoter Universal Primer



04

Expression of Gene ScFv



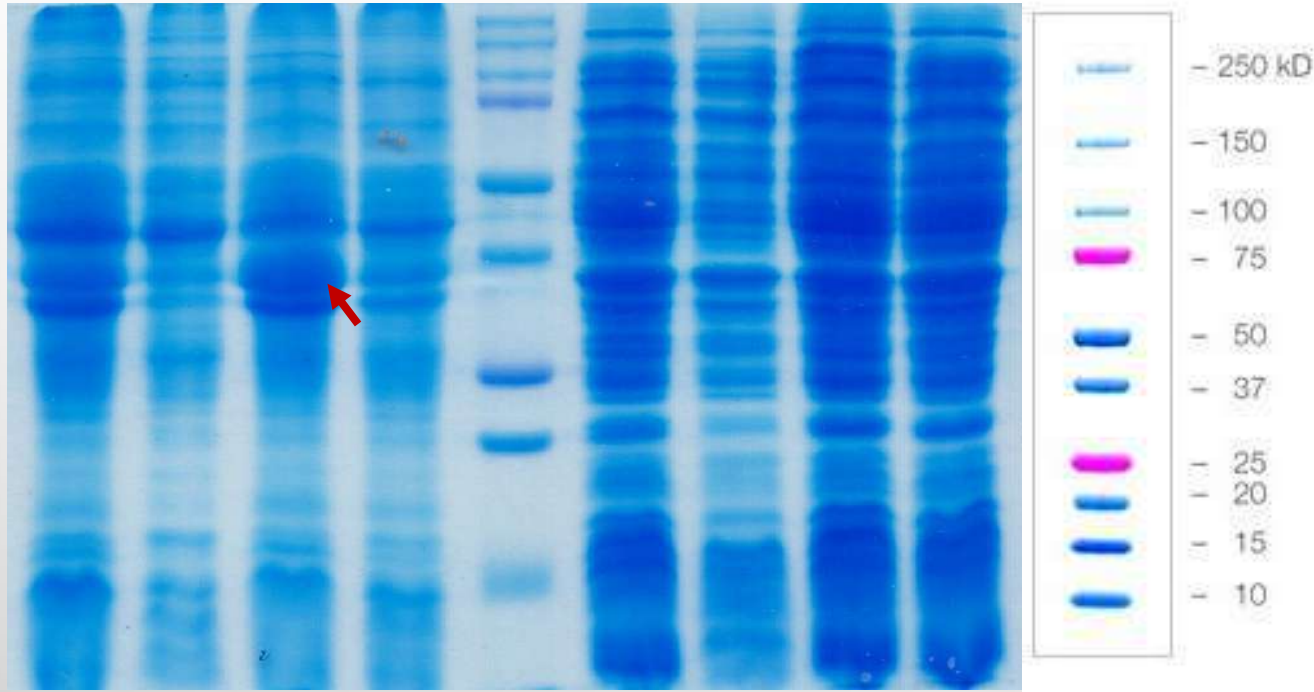
Parameter expressions:

1. LB medium with a total volume of 20 mL
2. OD₆₀₀ of induction was around 0.6-0.7
3. IPTG concentration was 0.5 mM
4. Incubation post-induction was 4 hours in 37°C

05

Characterization of ScFv

Electrophoregram of *E. coli* BL21(DE3)

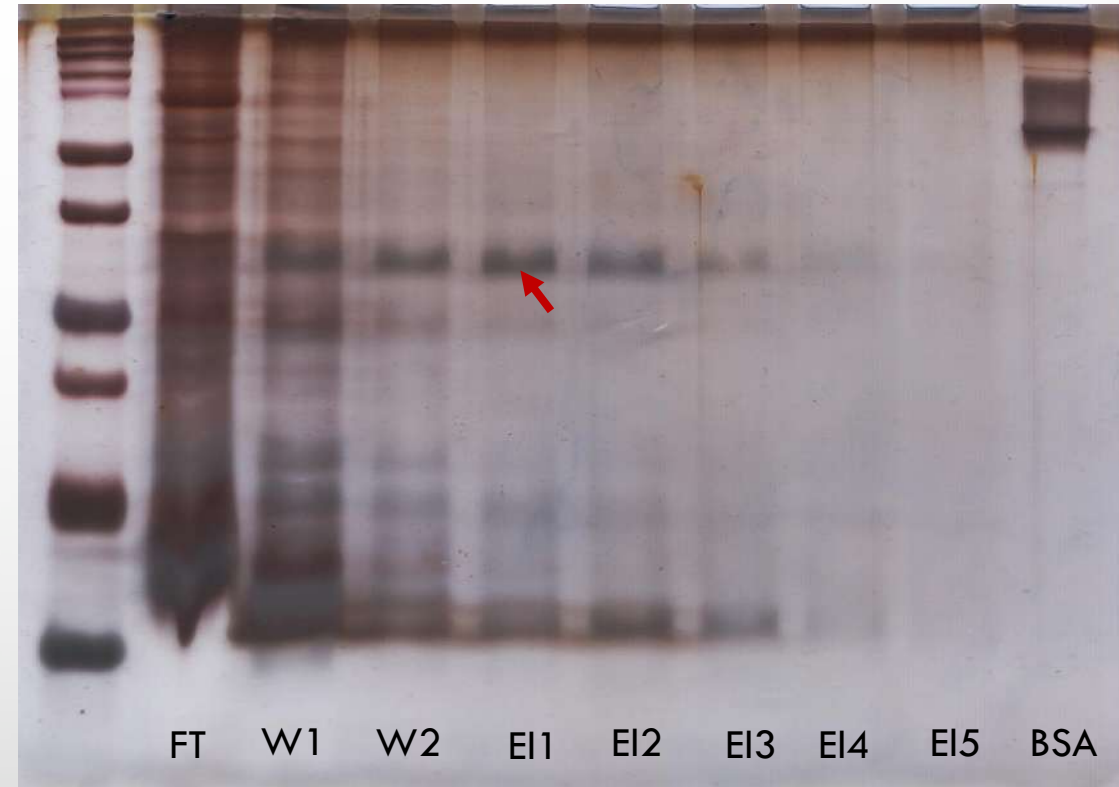


1

2

1. *E. coli* BL21(DE3)_pET21b(+)-DENV Induced (Soluble)
 2. *E. coli* BL21(DE3)_pET21b(+)-DENV Induced (Insoluble)
- Other lanes are controls

Electrophoregram (Silver stained) of *E. coli* BL21(DE3)



Optimal elutions around 100-200 mM imidazole

CONCLUSION



A

The scFv-anti NS1 has been successfully expressed



B

The recombinant scFv-anti NS1 were produced in the *E. coli* BL21(DE3) system in the Luria Bertani medium



Thank
you