



# PENELITIAN BIMBINGAN S1 FKUI

Prof. Dr. Drs. H. Kusmardi, MSc., CIRR

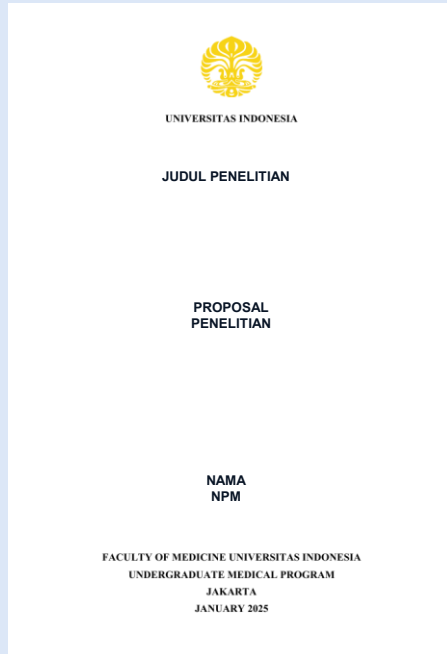
Departemen Patologi Anatomi FKUI  
HCRC IMERI FKUI


DDRC IMERI FKUI  
Kelompok Riset Patobiologi III

# Tahapan

1. Penulisan Proposal
2. Review modul Riset
3. Perbaikan
4. Kaji Etik
5. Pewarnaan IHK oleh teknisi lab
6. Penyerahan set sediaan ke mahasiswa
7. Install indomicroview di laptop (non apple)
8. Pengambilan foto mikroskopis
9. Cropping mikroskopis
10. Install image J dan IHC profiler
11. Penentuan ekspresi protein
12. Tabulasi data
13. Penulisan Tugas Akhir
14. Penulisan manuskrip
15. Publikasi

# 1. Penulisan Proposal



  
UNIVERSITAS INDONESIA

JUDUL PENELITIAN

PROPOSAL  
PENELITIAN

NAMA  
NPM

FACULTY OF MEDICINE UNIVERSITAS INDONESIA  
UNDERGRADUATE MEDICAL PROGRAM  
JAKARTA  
JANUARY 2025



- ❖ Format Proposal mengikuti template dari FKUI
- ❖ Daftar Pustaka mengikuti aturan Vancouver

## 2. Review Modul Riset



**Perlu waktu  
beragam,  
bergantung  
kesibukan  
reviewer**



**Komentar  
ditanggapi**

# 3. Perbaikan

Disetujui oleh Pembimbing  
dan Reviewer



# 4. Kaji Etik



UNIVERSITAS  
INDONESIA

*Veritas, Probitas, Iustitia*  
EST. 1849

## Komite Etik Penelitian Kesehatan

Fakultas Kedokteran Universitas Indonesia

Rumah Sakit Cipto Mangunkusumo



- Mengajukan lewat Web (<https://komite-etik.fk.ui.ac.id/p/index.php/p/user/register>)
- Biaya Rp 200.000
- Kelengkapan:
  1. Form kaji etik yang telah diisi
  2. Proposal
  3. Tanda tangan pembimbing, kolit, Kadep
  4. Menunggu 4-6 pekan

## 5. Pewarnaan IHK oleh Teknisi Lab

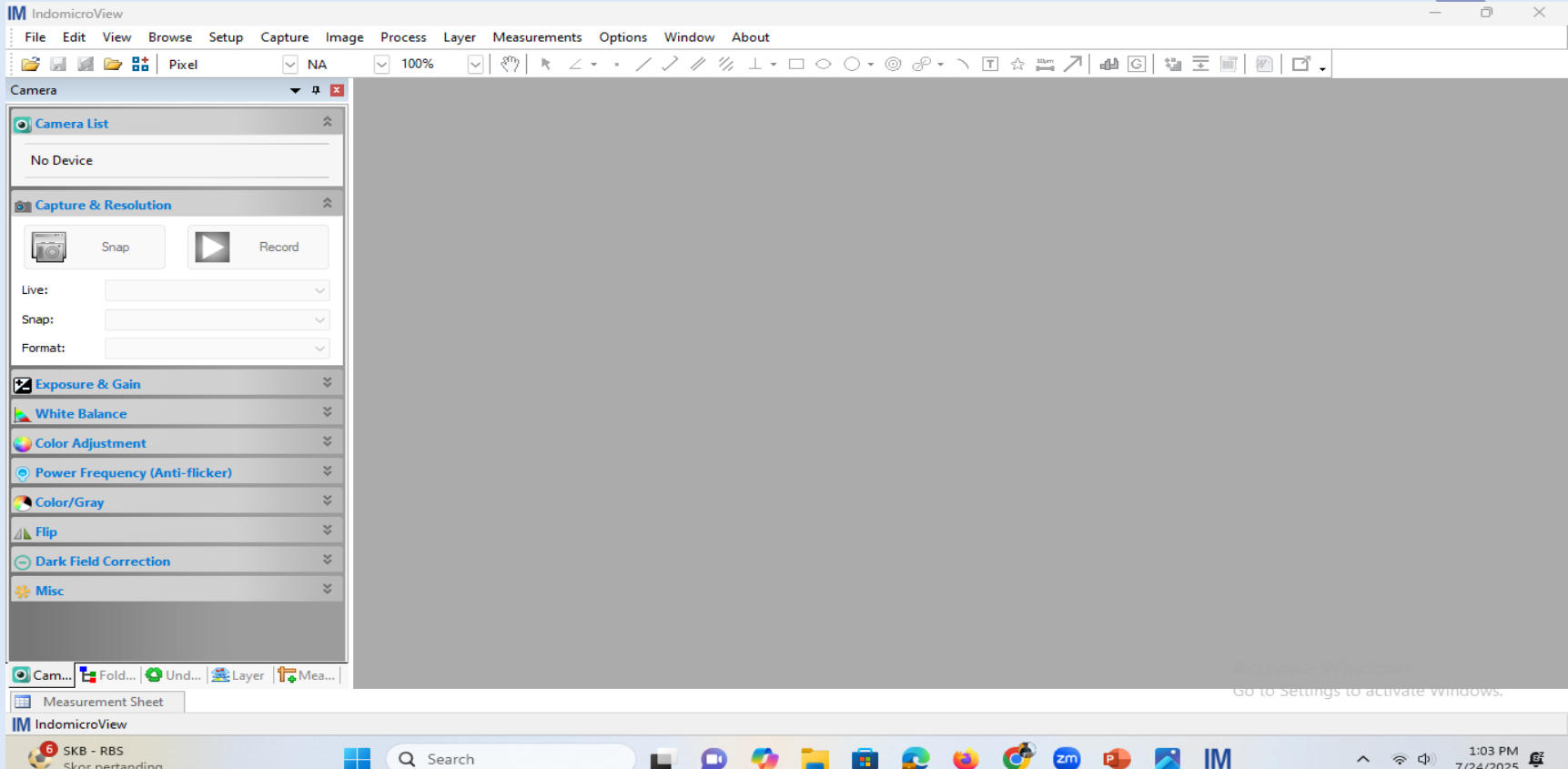
- Mahasiswa mencari antibodi primer yang sesuai
- Diskusi dengan pembimbing mengenai *datasheet antibody*
- Pembelian antibodi
- Penyerahan antibodi ke teknisi
- Waktu pewarnaan IHK 1-2 pekan sesuai hasil optimasi



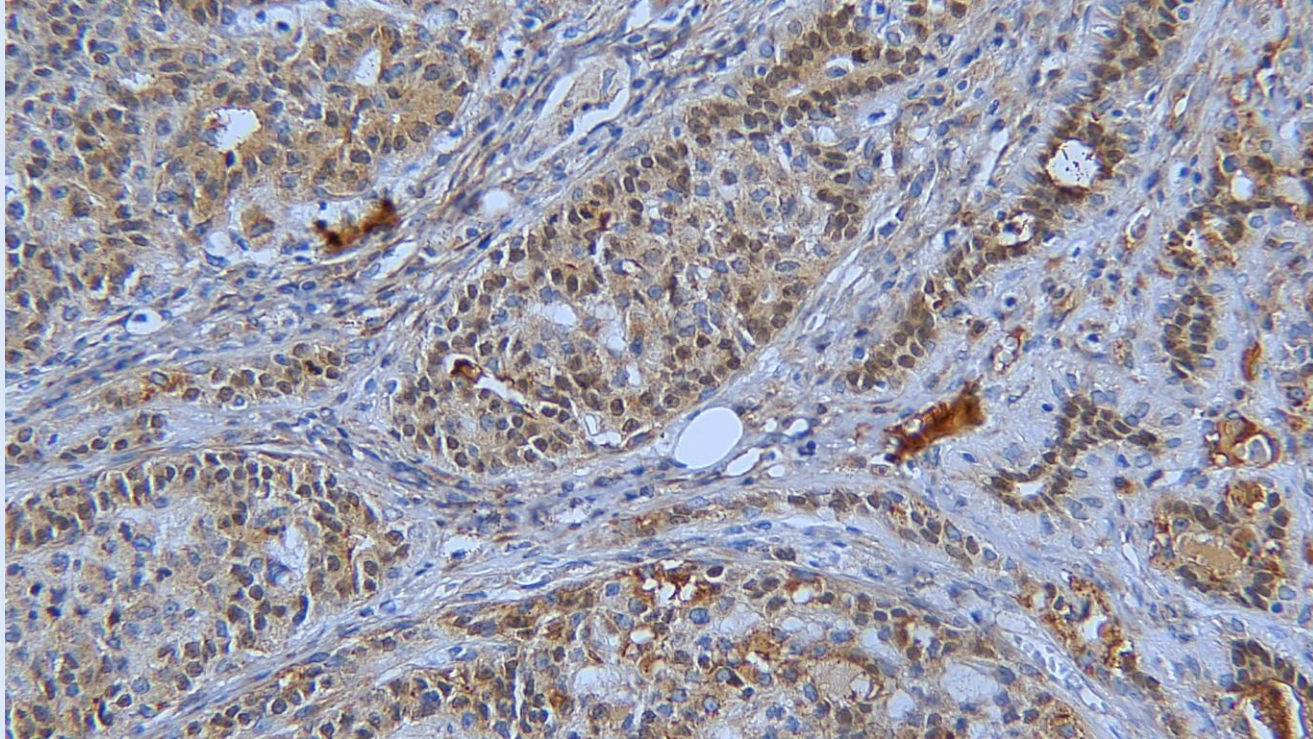
## 6. Penyerahan Set Sediaan Ke Mahasiswa



# 7. Instal Indomicroview pada Laptop (non-apple)



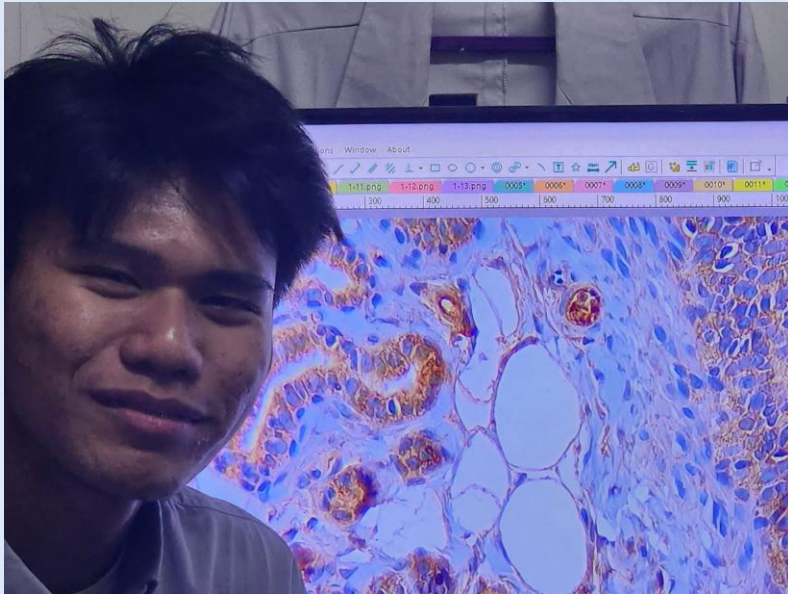
## 8. Pengambilan Foto Mikroskopis



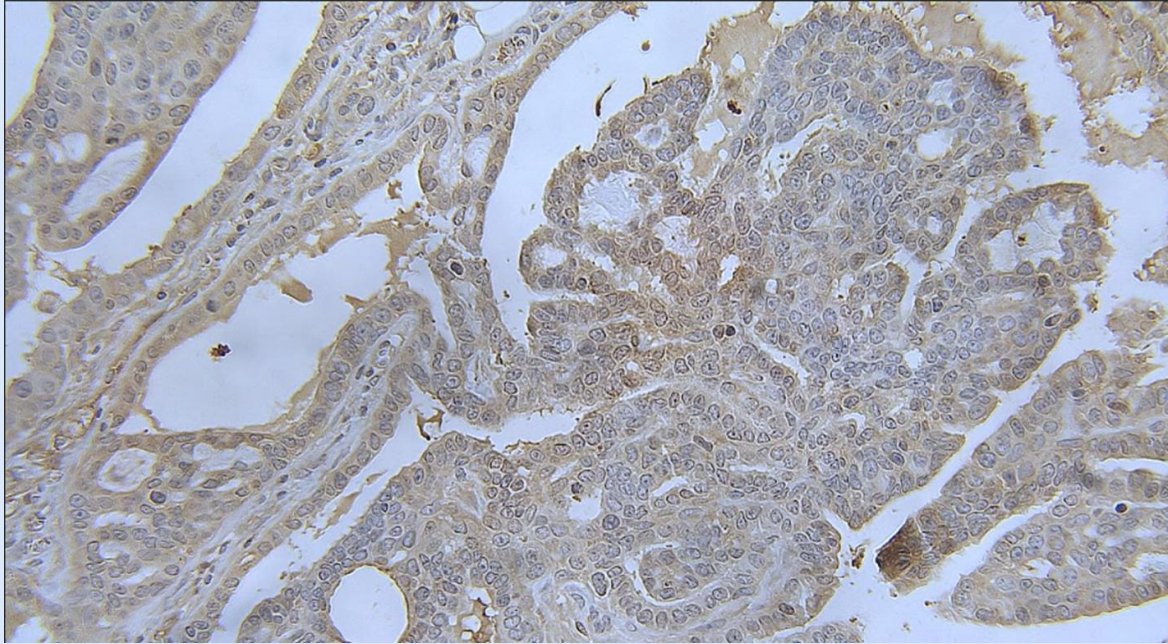
# Pengambilan Foto Mikroskopis (perkiraan watu 1-2 hari, tergantung kompleksitas)



# Pengambilan Foto Mikroskopis



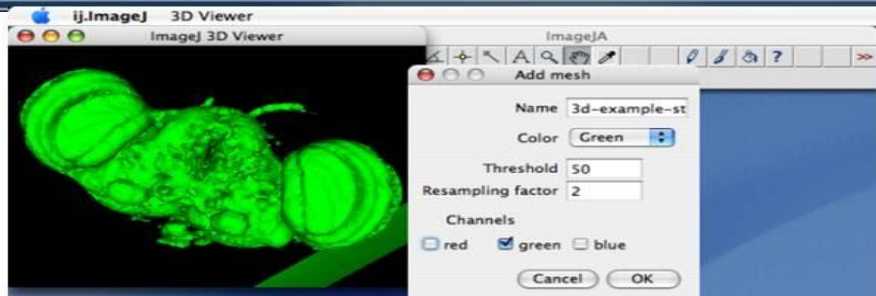
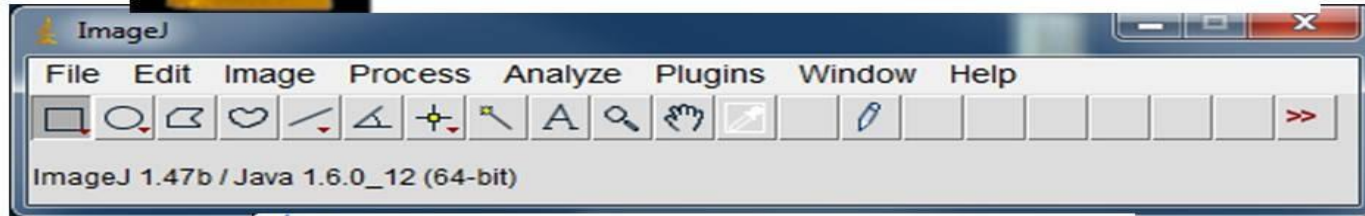
## 9. *Cropping* Mikroskopis



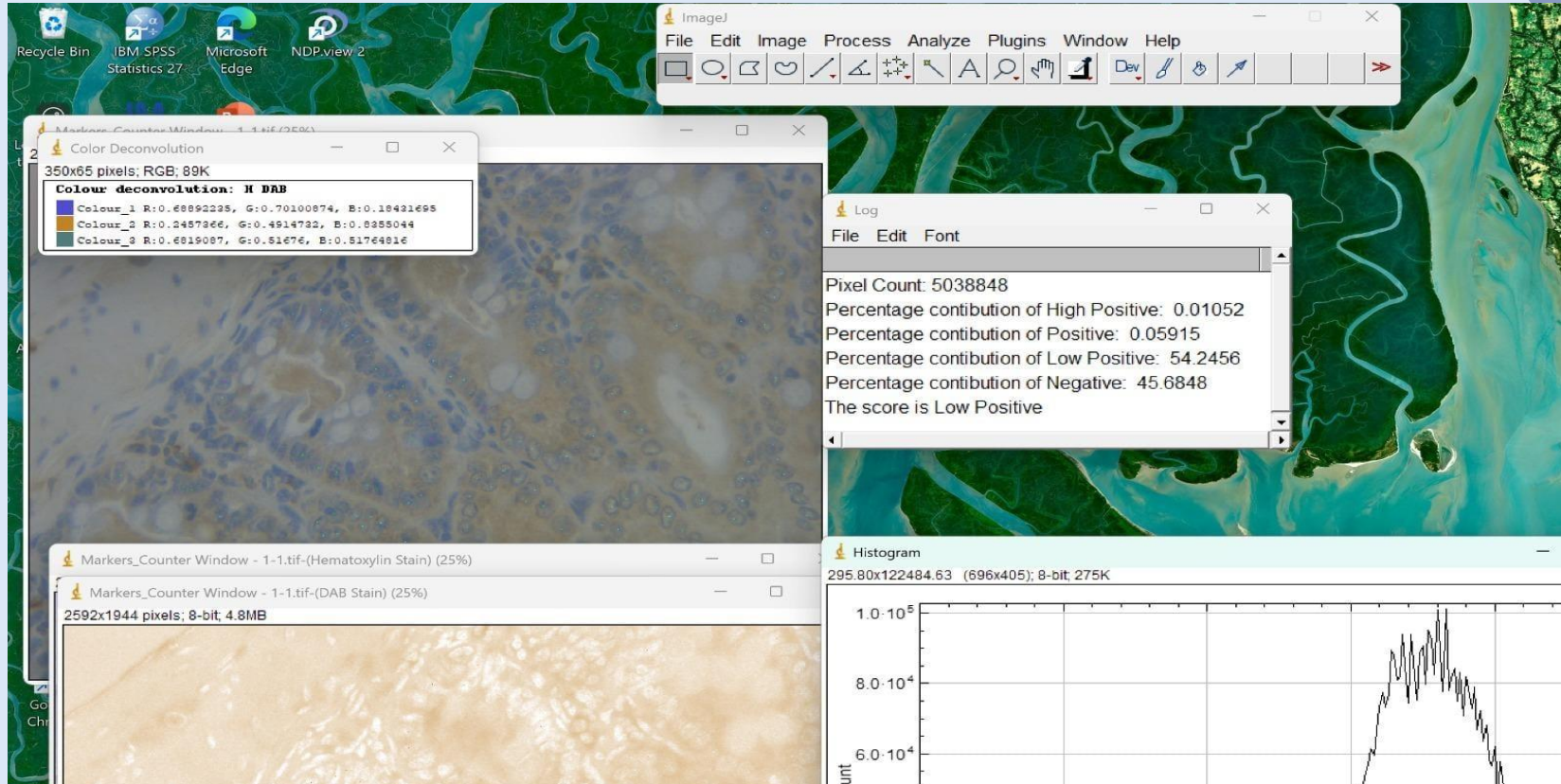
# 10. Install ImageJ dan IHC Profiler



**ImageJ**  
Image Processing & Analysis in Java



# 11. Penentuan Ekspresi Protein



# 12. Tabulasi Data

<https://www.youtube.com/watch?v=o-dOux5tH9o>

ANALISIS DATA (IMAGEJ) - CASPASE 3 17.126 (PENGAMBILAN: 9 AGUSTUS 2019)						
Slide	%Positif Kuat	%Positif Sedang	%Positif Lemah	%Negatif	Indeks	Rata-rata Indeks
I1 - 1	42,4105%	2,2498%	2,0453%	53,2944%	233,7764%	228,4162%
I1 - 2	41,5313%	2,1968%	2,0018%	54,2701%	230,9893%	
I1 - 3	0,0995%	21,7530%	78,0886%	0,0589%	221,8932%	
I1 - 4	0,0815%	21,3059%	78,5935%	0,0191%	221,4497%	
I1 - 5	0,0938%	33,7912%	66,1086%	0,0064%	233,9722%	
I2 - 1	0,0906%	10,5662%	89,1376%	0,2056%	210,5417%	210,4104%
I2 - 2	0,0799%	12,1264%	87,6801%	0,1136%	212,1724%	
I2 - 3	0,0906%	6,7979%	93,1046%	0,0070%	206,9721%	
I2 - 4	0,0946%	9,8229%	90,0232%	0,0592%	209,9527%	
I2 - 5	0,0943%	12,3635%	87,4032%	0,1390%	212,4129%	
I3 - 1	0,1030%	20,9492%	78,8854%	0,0624%	221,0928%	215,5947%
I3 - 2	0,0957%	15,5553%	84,3169%	0,0321%	215,7146%	
I3 - 3	0,0666%	16,1191%	83,7899%	0,0244%	216,2279%	
I3 - 4	0,0665%	10,8392%	89,0584%	0,0358%	210,9363%	
I3 - 5	0,0999%	13,8418%	86,0189%	0,0394%	214,0072%	

# 13. Penulisan Tugas Akhir



UNIVERSITAS INDONESIA

**EFEK PEMBERIAN EKSTRAK TERTARGET LUNASIN DARI  
KEDELAI TERHADAP EKSPRESI PD-L1 PADA JARINGAN  
KANKER PAYUDARA TIKUS *SPRAGUE-DAWLEY* YANG  
DIINDUKSI DMBA**

**SKRIPSI**

# 14. Penulisan Manuskrip

1. Mahasiswa sebagai first author
2. Dosen sebagai corresponding author
3. Sitasi artikel bimbingan lainnya

**Food Research 9 (3) : 50 - 56 (June 2025)**

Journal homepage: <https://www.myfoodresearch.com>

**FOOD**  
**RESEARCH**

## **Gastroprotective effect of Etawa goat's milk through biochemical biomarkers**

<sup>1,\*</sup>Rusdi, N.K., <sup>2,3,4</sup>Kusmardi, K., <sup>5</sup>Rosaliana, A., <sup>5</sup>Cahyati, S.N., <sup>5</sup>Sulistiawati, A.P.,  
<sup>5</sup>Bariroh, T., <sup>5</sup>Sunaryo, H., <sup>6,7</sup>Farihatun, A. and <sup>8</sup>Salleh, M.N.

<sup>1</sup>*Master of Pharmacy Education Program, School of Postgraduate, Universitas Muhammadiyah Prof. Dr. Hamka, 12740, Warung Jati Barat Street, Pancoran, South Jakarta, Indonesia*

<sup>2</sup>*Drug Development Research Cluster, Indonesia Medical Education and Research Institute, Universitas Indonesia, 10430, Salemba Raya Street, Jakarta, Indonesia*

<sup>3</sup>*Department of Anatomic Pathology, Faculty of Medicine, Universitas Indonesia, 10430, Salemba Raya Street, Jakarta, Indonesia*

<sup>4</sup>*Human Cancer Research Cluster, Indonesia Medical Education and Research Institute, Universitas Indonesia, 10430, Salemba Raya Street, Jakarta, Indonesia*

<sup>5</sup>*Faculty of Pharmacy and Science, Universitas Muhammadiyah Prof. Dr. Hamka, 13470, Delima II/IV Street, Perumnas Klender, East Jakarta, Indonesia*

<sup>6</sup>*Doctoral Program for Biomedical Sciences, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia*

<sup>7</sup>*College of Health Sciences Muhammadiyah, 46216, KH. Ahmad Dahlan street, Ciamis, Indonesia*

<sup>8</sup>*Faculty of Health Sciences, University College of MAIWP International, 50400, Tun Razak Street, Kuala Lumpur, Malaysia*

# 14. Penulisan Manuskrip

1. Mahasiswa sebagai first author
2. Dosen sebagai corresponding author
3. Sitasi artikel bimbingan lainnya

Received: 25 February 2025

Revised: 30 March 2025

Accepted: 11 April 2025

DOI: 10.48309/jmpcr.2025.513860.1643

Journal of Medicinal  
and Pharmaceutical  
Chemistry Research



## FULL PAPER

# The potential role of goat milk in regulating CD4+ and CD8+ T cells in ethanol 80%-induced gastritis: A research using a gastritis rat model

Atun Farihatun<sup>a,b</sup> | Kusmardi Kusmardi<sup>c,d,e,\*</sup> | Ari Estuningtyas<sup>f</sup> | Moch. Nazil Salleh<sup>g</sup>

<sup>a</sup>Doctoral Program in Biomedical Sciences, Faculty of Medicine, University of Indonesia, Jakarta, Indonesia

<sup>b</sup>STIKes Muhammadiyah Ciamis, West Java, Indonesia

<sup>c</sup>Department of Pathological Anatomy, Faculty of Medicine, University of Indonesia, Jakarta, Indonesia

<sup>d</sup>Drug Development Research Center, Indonesian Medical Education and Research Institute, Faculty of Medicine, University of Indonesia

Gastritis, an inflammation in the stomach, is a result of several factors, including ethanol. In this investigation, rats were used as models in order to examine how goat milk affects the ratio of CD4+ and CD8+ immune cells in the stomachs of rats suffering from gastritis. This study aimed to examine how goat milk affects the ratio of CD4+ and CD8+ T cells in gastritis rat models induced by 80% ethanol. A pre-clinical design was employed in this experimental research. In this study, male Sprague Dawley rats were assigned to five groups. The control group did not receive 80% ethanol induction and no goat milk administration.

# 14. Penulisan Manuskrip

1. Mahasiswa sebagai first author
2. Dosen sebagai corresponding author
3. Sitasi artikel bimbingan lainnya

Mal J Nutr 31(1): 075-085, 2025

## **Evaluating the effects of goat's milk on inflammatory responses in rat model with gastritis**

**Atun Farihatun<sup>1,2\*</sup>, Kusmardi Kusmardi<sup>3,4,5\*</sup>, Ari Estuningtyas<sup>6</sup> & Mohd Nazil Salleh<sup>7</sup>**

*<sup>1</sup>Doctoral Program in Biomedical Sciences, Faculty of Medicine, University of Indonesia, Jakarta, Indonesia; <sup>2</sup>STIKes Muhammadiyah Ciamis, West Java, Indonesia; <sup>3</sup>Department of Pathological Anatomy, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia ; <sup>4</sup>Drug Development Research Center, Indonesian Medical Education and Research Institute, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia; <sup>5</sup>Human Cancer Research Center, Indonesian Medical Education and Research Institute, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia; <sup>6</sup>Department of Pharmacology, Faculty of Medicine, University of Indonesia, Jakarta, Indonesia; <sup>7</sup>Faculty of Health Sciences, University College of MAIWP International, Kuala Lumpur, Malaysia*

## 15. Publikasi

- Seminar internasional dengan output Jurnal Scopus
- Langsung submit di web jurnal Scopus

# Terima Kasih

Do you have any questions?

**CREDITS:** This presentation template was created by [Slidesgo](#), and includes icons by [Flaticon](#), and infographics & images by [Freepik](#)

