

## DAFTAR PUSTAKA

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## LAMPIRAN

### Lampiran 1



**KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN**  
**UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN**  
**KOMITE ETIK PENELITIAN KESEHATAN**  
**RSPTN UNIVERSITAS HASANUDDIN**  
**RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR**  
 Sekretariat : Lantai 2 Gedung Laboratorium Terpadu  
 JL PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.  
 Contact Person: dr. Agussalim Bukhari...MMed,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431



**REKOMENDASI PERSETUJUAN ETIK**  
 Nomor : 534/UN4.6.4.5.31/ PP36/ 2020

Tanggal: 7 September 2020

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH20070289	No Sponsor	
Peneliti Utama	<b>Dr.dr. Faridha Ilyas,SpKK,FINSDV,FAADV</b>	Protokol	
Judul Peneliti	Efek Topikal Gel Ekstrak Kurkumin Terhadap Inflamasi Kulit, TNF- $\alpha$ dan TGF- $\beta$ Mencit Albino Yang Diinduksi 2,4 Dinitrochlorobenzene		
No Versi Protokol	<b>1</b>	Tanggal Versi	<b>8 Juli 2020</b>
No Versi PSP		Tanggal Versi	
Tempat Penelitian	<b>Laboratoium Fakultas Kedokteran Universitas Hasanuddin Makassar</b>		
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian Kesehatan FKUH	Nama <b>Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)</b>	7 September 2020 sampai 7 September 2021	
Sekretaris Komisi Etik Penelitian Kesehatan FKUH	Nama <b>dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)</b>	Tanda tangan	

**Kewajiban Peneliti Utama:**

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

## Lampiran 2

Pharmaceutical Chemistry laboratory, Faculty of Pharmacy, UNHAS



### Certificate of Analysis

Product Description: Gel  
Catalog Number: 101  
Lot: QR13341

Formula: Curcumin, Carbomer, TEA, Glys, Hydantoin  
CAS #: 9004-53-9  
Physical Description: Gel

Formula Weight: N/A  
Storage: 15-30 °C

Test	Specification	Result
Identity Test	Passes	Passes
Source		
Moisture	Report Result	6.56%
pH	Report Result	

Head of Laboratory,

Dr. Yusnita Rifai

## Lampiran 3

**SIGMA-ALDRICH®**

sigma-aldrich.com

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Website: [www.sigmaaldrich.com](http://www.sigmaaldrich.com)

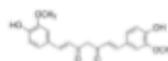
Email USA: [techserv@sial.com](mailto:techserv@sial.com)

Outside USA: [eurtechserv@sial.com](mailto:eurtechserv@sial.com)

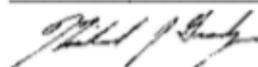
Product Name:  
Curcumin - from *Curcuma longa* (Turmeric), powder

### Certificate of Analysis

**Product Number:** C1386  
**Batch Number:** MKCF7577  
**Brand:** SIGMA  
**CAS Number:** 458-37-7  
**MDL Number:** MFCD00008365  
**Formula:** C<sub>21</sub>H<sub>20</sub>O<sub>6</sub>  
**Formula Weight:** 368.38 g/mol  
**Storage Temperature:** Store at -20 °C  
**Quality Release Date:** 26 JAN 2018



Test	Specification	Result
Appearance (Color)	Yellow to Orange	Orange
Appearance (Form)	Powder	Powder
Solubility (Color)	Yellow to Orange	Yellow-Orange
Solubility (Turbidity)	Clear to Hazy	Clear
10 mg/mL, EtOH		
UV/VIS Absorbance	420 - 430 nm	424 nm
Purity (HPLC)	≥ 65 %	71 %



Michael Grady, Manager  
Quality Control  
Milwaukee, WI US

## Lampiran 4

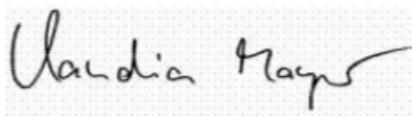
**SIGMA-ALDRICH**

3050 Spruce Street, Saint Louis, MO 63103 USA  
Email USA: techserv@sial.com Outside USA: eurtechserv@sial.com

### Certificate of Analysis

**Product Name:** 1-CHLORO-2,4-DINITROBENZENE  
97 %  
**Product Number:** 138630  
**Batch Number:** STBJ0984  
**Brand:** Aldrich  
**CAS Number:** 97-00-7  
**Formula:**  $C_6H_3(NO_2)_2$   
**Formula Weight:** 202.55  
**Quality Release Date:** 27 MAR 2019

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	FAINT YELLOW TO YELLOW TO BROWN	FAINT YELLOW
APPEARANCE (FORM)	POWDER OR CRYSTALS OR SOLID OR CHUNKS	POWDER
PURITY (GC AREA %)	≥ 96.5 %	> 99.9 %
INFRARED SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS
PROTON NMR SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS



Claudia Mayer  
Manager Quality Control  
Steinheim, Germany

Lampiran 5



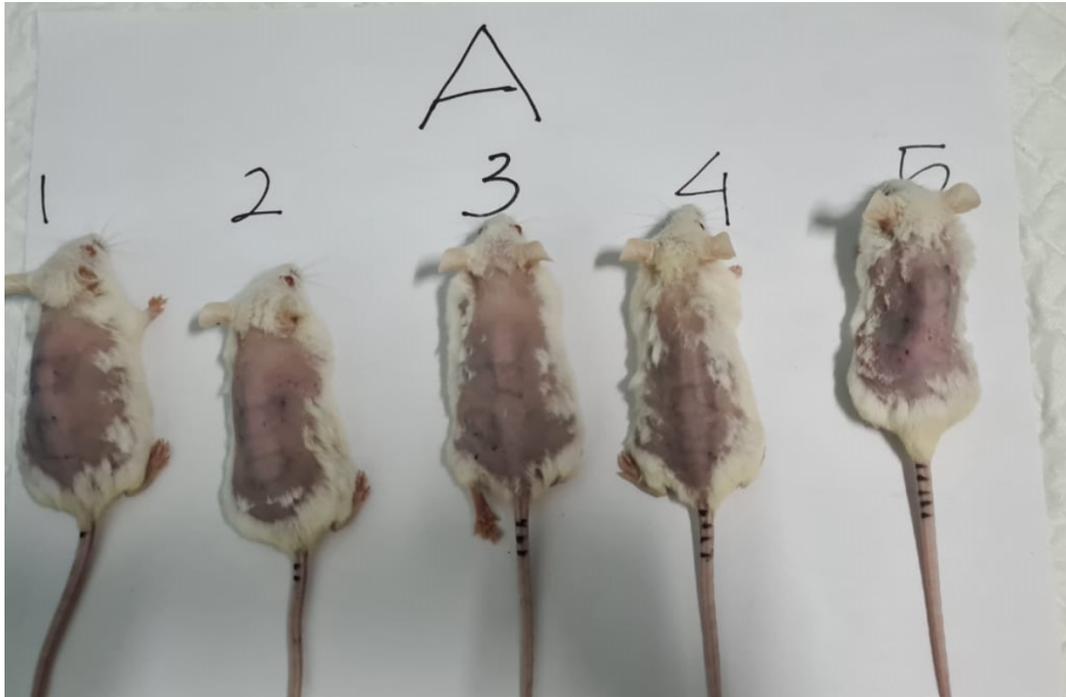
## Lampiran 6



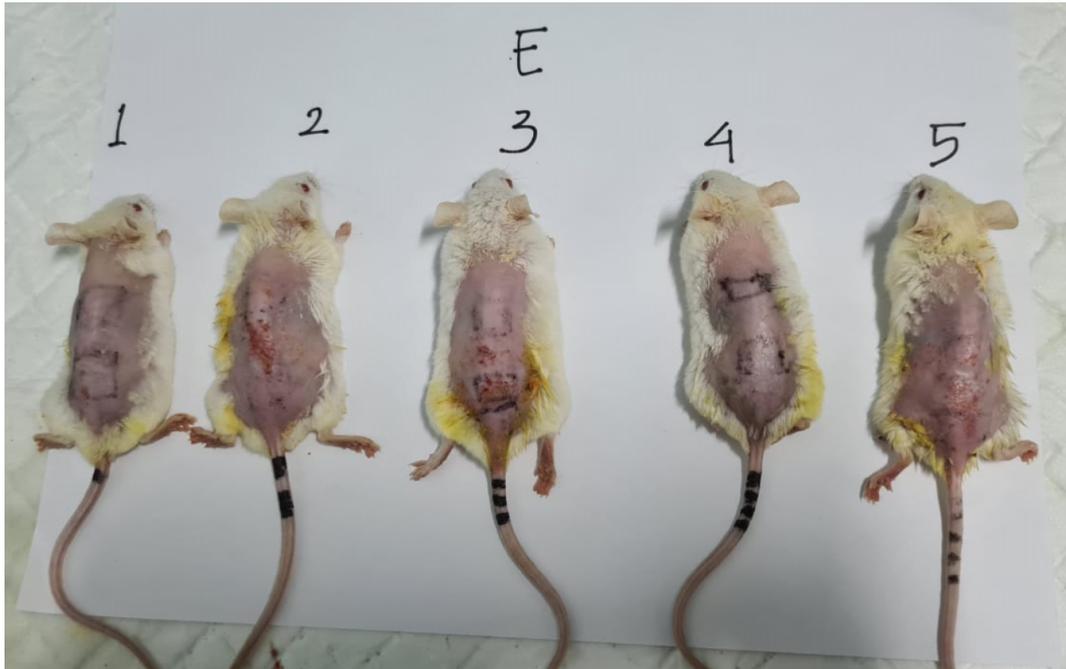




Lampiran 7



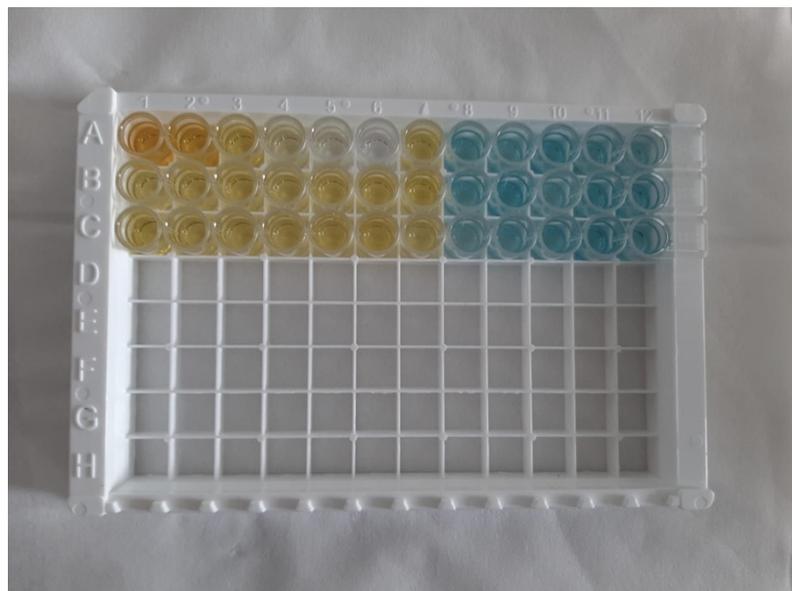
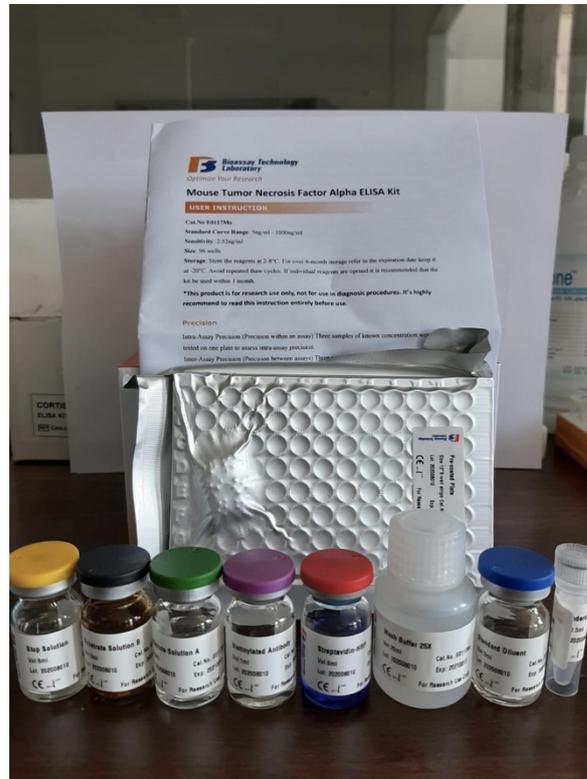




## Lampiran 8



## Lampiran 9





## Lampiran 10

No	Kode Sampel	Nilai OD	Hasil ( ng/ml )
1	A1	0,6116	145,3327
2	A2	0,6477	149,2469
3	A3	0,7295	157,6706
4	A4	0,6012	144,1785
5	A5	0,7884	163,4320
6	B1	0,7503	175,7389
7	B2	0,6672	167,4468
8	B3	0,73215	173,9636
9	B4	0,95525	194,2233
10	B5	0,84205	184,3134
11	D1	0,72075	172,8412
12	D2	0,7826	178,8152
13	D3	0,9181	190,9500
14	D4	0,6538	166,0838
15	D5	0,67765	168,4692
16	C1	0,7655	177,1114
17	C2	0,7203	172,7872
18	C3	0,53215	152,5533
19	C4	0,59305	159,5318
20	C5	0,69015	169,7616
21	E1	0,8388	184,0116
22	E2	0,8059	180,9592
23	E3	0,6221	162,6260
24	E4	0,63325	163,9259
25	E5	0,6639	167,1359
26	F1	0,622	162,7234
27	F2	0,5624	156,1035
28	F3	0,6313	163,7184
29	F4	0,6526	165,9632
30	F5	0,596	159,8897

**Multiple Comparisons Kadar TNF Alfa**

LSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	p
A	B	-27,165	5,722	0,000
	C	-23,460	5,722	0,000
	D	-14,377	5,722	0,019
	E	-19,760	5,722	0,002
	F	-9,707	5,722	0,103
	B	A	27,165	5,722
C		3,705	5,722	0,523
D		12,788	5,722	0,035
E		7,405	5,722	0,208
F		17,458	5,722	0,005
C		A	23,460	5,722
	B	-3,705	5,722	0,523
	D	9,083	5,722	0,126
	E	3,700	5,722	0,524
	F	13,752	5,722	0,024
	D	A	14,377	5,722
B		-12,788	5,722	0,035
C		-9,083	5,722	0,126
E		-5,383	5,722	0,356
F		4,669	5,722	0,423
E		A	19,760	5,722
	B	-7,405	5,722	0,208
	C	-3,700	5,722	0,524
	D	5,383	5,722	0,356
	F	10,052	5,722	0,092

F	A	9,707	5,722	0,103
	B	-17,458	5,722	0,005
	C	-13,752	5,722	0,024
	D	-4,669	5,722	0,423
	E	-10,052	5,722	0,092