

LAMPIRAN

Lampiran 1. Hasil Determinasi Tanaman



UNIVERSITAS GADJAH MADA
FAKULTAS FARMASI
Sekip Utara, Yogyakarta 55281 Telp./Fax. +62 274 543120
http://farmasi.ugm.ac.id, E-mail: farmasi@ugm.ac.id

SURAT KETERANGAN

No.: UGM/FA/ 2047 /M/03/02

Kepada Yth. :
Sdri/Sdr. Fatma Sari Masitha
NIM. 20140350046
Fakultas Farmasi UMY
Di Yogyakarta

Dengan hormat,

Bersama ini kami sampaikan hasil identifikasi sampel yang Saudara kirimkan ke Departemen Biologi Farmasi, Fakultas Farmasi UGM, adalah :

No.Pendaftaran	Jenis	Suku
47	<i>Camellia sinensis</i> (L.) O. K.	Theaceae
	<i>Amnona muricata</i> L.	Annonaceae
	<i>Citrus reticulata</i> Blanco	Rutaceae

Demikian, semoga dapat digunakan sebagaimana mestinya.

Mengetahui,
Dekan

Prof. Dr. Agung Endro Nugroho, M.Si., Apt

Yogyakarta, 3 Mei 2018
Ketua Departemen Biologi Farmasi

Dr. Indah Purwantini, M.Si., Apt

Lampiran 2. Perhitungan Rendeman Ekstrak

1. Daun Teh

Berat Serbuk Kering : 500 g
Total volume Esktrak cair : 2.450 ml
Volume ekstrak : 1000 mL (di evaporasi 1000 mL)

Setelah dikentalkan, maka :

Berat Ekstrak Kental : 27,3 g

Konsentrasi serbuk kering total : $\frac{500 \text{ g}}{2450 \text{ mL}} = 0,204 \text{ g/mL}$

Perhitungan rendemen

Ekstrak Etanol Daun Teh :

Konsentrasi serbuk kering : $\frac{500 \text{ g}}{2450 \text{ mL}} \times 1000 \text{ mL} = 204 \text{ g}$

% rendemen EEDT : $\frac{27,3 \text{ g}}{204 \text{ g}} \times 100 \% = 13,38 \%$

2. Daun Sirsak

Berat serbuk kering : 500 g
Total volume esktrak cair : 2550 ml
Volume ekstrak : 1000 mL

Setelah dikentalkan, maka :

Berat Ekstrak Kental : 28,7 g

Konsentrasi serbuk kering total : $\frac{500 \text{ g}}{2550 \text{ mL}} = 0,196 \text{ g/mL}$

Perhitungan rendemen

Ekstrak Etanol Daun Sirsak :

Konsentrasi serbuk kering : $\frac{500 \text{ g}}{2550 \text{ mL}} \times 1000 \text{ mL} = 196 \text{ g}$

% rendemen EEDS : $\frac{28,7 \text{ g}}{196 \text{ g}} \times 100 \% = 14,6 \%$

Lampiran 3. Data Perhitungan Uji Antioksidan

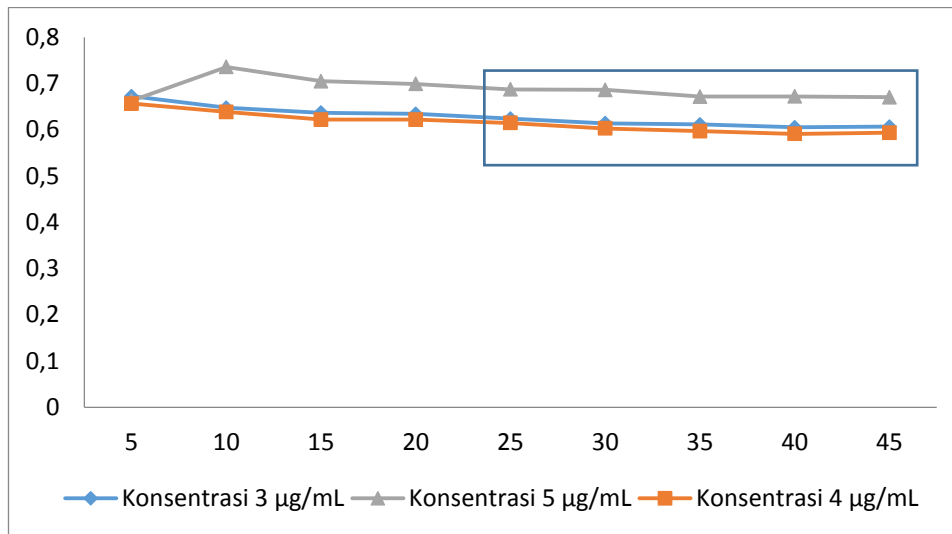
1. Penentuan Operating Time

Konsentrasi 3 µg/mL									
Perlakuan	Absorbansi (nm)								
Waktu	5'	10'	15'	20'	25'	30'	35'	40'	45'
Replikasi 1	0,679	0,656	0,638	0,632	0,623	0,612	0,611	0,605	0,609
Replikasi 2	0,683	0,663	0,651	0,652	0,641	0,629	0,629	0,623	0,621
Replikasi 3	0,655	0,623	0,621	0,618	0,607	0,6	0,594	0,587	0,589
Rata-Rata	0,672	0,647	0,637	0,634	0,624	0,614	0,611	0,605	0,606

Konsentrasi 4 µg/mL									
Perlakuan	Absorbansi (nm)								
Waktu	5'	10'	15'	20'	25'	30'	35'	40'	45'
Replikasi 1	0,65	0,633	0,612	0,615	0,608	0,596	0,588	0,58	0,581
Replikasi 2	0,661	0,643	0,628	0,624	0,621	0,613	0,608	0,604	0,609
Replikasi 3	0,658	0,639	0,625	0,626	0,614	0,599	0,594	0,589	0,59
Rata-Rata	0,656	0,638	0,622	0,622	0,614	0,603	0,597	0,591	0,593

Konsentrasi 5 µg/mL

Konsentrasi 5 µg/mL									
Perlakuan	Absorbansi (nm)								
Waktu	5'	10'	15'	20'	25'	30'	35'	40'	45'
Replikasi 1	0,584	0,727	0,713	0,708	0,684	0,679	0,668	0,665	0,664
Replikasi 2	0,686	0,714	0,704	0,698	0,693	0,698	0,68	0,682	0,68
Replikasi 3	0,719	0,765	0,697	0,691	0,684	0,681	0,667	0,669	0,666
Rata-rata	0,663	0,735	0,705	0,699	0,687	0,686	0,672	0,672	0,670



Operating time : 30 menit

2. Absorbansi DPPH

Perlakuan	Absorbansi
Replikasi 1	0,691
Replikasi 2	0,708
Replikasi 3	0,708
Rata-rata	0,7023

3. Absorbansi Uji DPPH dari Sampel dan Vitamin C

a. Absorbansi uji antioksidan vitamin C

Perlakuan	Absorbansi µg/mL									
	0,25	0,5	1	2	5	10	20	30	40	
Rep1	0,630	0,613	0,634	0,664		0,385	0,140	0,071		
Rep 2	0,563	0,647	0,645	0,600	0,566	0,395	0,26	0,046	0,065	
Rep 3	0,654	0,663	0,636	0,611	0,547	0,426	0,168	0,047	0,058	
Rata-Rata	0,6157	0,641	0,638 3	0,6250	0,5565	0,4020	0,1893	0,0547	0,0615	
SD	0,047	0,026	0,006	0,034	0,013	0,021	0,063	0,014	0,005	

b. Absorbansi uji dpph kombinasi daun teh dan sirsak

Perla kuan	Absorbansi										
	0,375 µg/mL	0,625 µg /mL	1,25 µg /mL	2,5 µg/ mL	5 µg/ mL	7,5 µg /mL	10 µg /mL	15 µg /mL	20 µg/ mL	30 µg/ mL	40 µg /mL
Rep1	0,645	0,647	0,658	0,648	0,643	0,606	0,535	0,471	0,505	0,310	0,211
Rep 2	0,673	0,686	0,692	0,648	0,665	0,614	0,529	0,488	0,517	0,307	0,172
Rep 3	0,638	0,675	0,700	0,664	0,675	0,573	0,531	0,504	0,405	0,277	0,173
Rata - Rata	0,652	0,669	0,683	0,653	0,661	0,598	0,532	0,488	0,476	0,298	0,186
SD	0,019	0,020	0,022	0,009	0,016	0,022	0,003	0,017	0,061	0,018	0,022

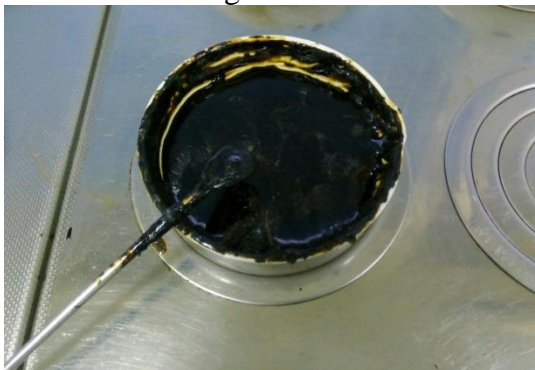
Lampiran 4. Dokumentasi



Perendaman serbuk simplisia selama kurang lebih 4 hari



Ekstrak cair diuapkan menggunakan rotary evaporator



Penguapan lanjutan menggunakan water bath



Ekstrak kering yang sudah di oven



Ekstrak cair setelah proses penyaringan



Pengukuran pH larutan ekstrak



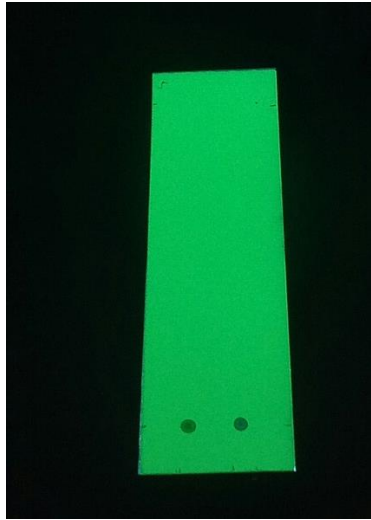
Larutan DPPH untuk uji antioksidan



Larutan kombinasi ekstrak untuk uji antioksidan menggunakan DPPH



Elusidasi EEDT dan EEDS pada plat KLT



Plat KLT dengan sampel EEDT sebelum di elusidasi



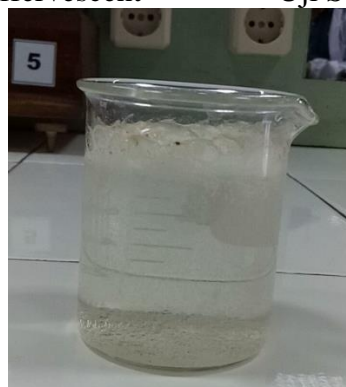
Plat KLT dengan sampel EEDS sebelum di elusidasi



Uji Kadar Air Granul Effervescent



Uji Sudut Diam Effervescent



Larutan granul effervescent

RCSB PDB - 3PP0: Crystal x Logged In x

www.rcsb.org/structure/3PP0

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Advanced Search | Browse by Annotations

Structure Summary 3D View Annotations Sequence Sequence Similarity Structure Similarity Experiment

Biological Assembly 1



3PP0

Crystal Structure of the Kinase domain of Human HER2 (erbB2).
DOI: 10.2210/pdb3PP0/pdb

Classification: [TRANSFERASE/TRANSFERASE INHIBITOR](#)
Organism(s): [Homo sapiens](#)
Expression System: [Antheraea](#)
Mutation(s): 3

Deposited: 2010-11-23 Released: 2011-03-30
Deposition Author(s): [Skene, R.J.](#), [Aertgeerts, K.](#), [Sogabe, S.](#)

Experimental Data Snapshot wwPDB Validation

Method: X-RAY DIFFRACTION Metric

3pp0.pdb

Protein HER 2 pada manusia yang didockingkan dengan molekul uji

RCSB PDB - 6B0F: ESTRO x

Secure | https://www.rcsb.org/structure/6b0f

RCSB PDB Deposit Search Visualize Analyze Download Learn More

Biological Assembly 1



6B0F

ESTROGEN RECEPTOR ALPHA LIGAND BINDING DOMAIN IN COMPLEX WITH LS;
DOI: 10.2210/pdb6B0F/pdb

Classification: [HORMONE RECEPTOR](#)
Organism(s): [Homo sapiens](#)
Expression System: [Escherichia coli](#)
Mutation(s): 3

Deposited: 2017-09-14 Released: 2018-04-04
Deposition Author(s): [Kirby, C.A.](#), [Baird, J.](#)

Experimental Data Snapshot wwPDB Validation

Method: X-RAY DIFFRACTION
Resolution: 2.86 Å
R-Value Free: 0.299
R-Value Work: 0.227

3D View: Structure | Electron Density | Ligand Interaction

Standalone Viewers
[Protein Workshop](#) | [Ligand Explorer](#)

Global Symmetry: Cyclic - C2 (3D View)
Global Stoichiometry: Homo 2-mer - A2

Biological assembly 1 assigned by authors and

This is version 1.1 of the entry. See complete [history](#).

Literature Download Report Citations

Protein Estrogen Alfa pada manusia yang didockingkan dengan molekul uji

```
log - Notepad
File Edit Format View Help
#####
# If you used AutoDock Vina in your work, please cite: #
# #
# O. Trott, A. J. Olson, #
# Autodock Vina: improving the speed and accuracy of docking #
# with a new scoring function, efficient optimization and #
# multithreading, Journal of Computational Chemistry 31 (2010) #
# 455-461 #
# DOI 10.1002/jcc.21334 #
# Please see http://vina.scripps.edu for more information. #
#####
Detected 2 CPUs
Reading input ... done.
Setting up the scoring function ... done.
Analyzing the binding site ... done.
Using random seed: 275879232
Performing search ... done.
Refining results ... done.

mode | affinity | dist from best mode
      | (kcal/mol) | rmsd l.b. | rmsd u.b.
-----|-----|-----|-----
1      | -6.9      | 0.000     | 0.000
2      | -6.5      | 3.859     | 5.553
3      | -6.4      | 5.216     | 9.936
4      | -6.3      | 1.621     | 1.962
5      | -6.3      | 5.554     | 8.743
6      | -6.2      | 8.993     | 13.051
7      | -6.2      | 1.893     | 2.144
8      | -6.1      | 6.083     | 7.678
9      | -6.0      | 9.313     | 13.251

writing output ... done.
```

Hasil docking senyawa dengan nilai RMSD