

DAFTAR PUSTAKA

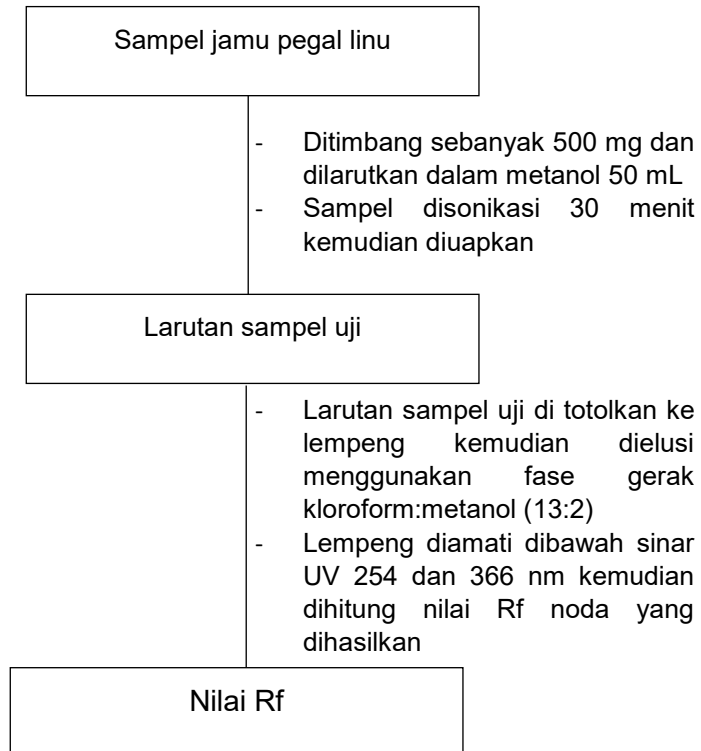
- Ahuja, S., & Dong, M. (2005). *Handbook of Pharmaceutical Analysis by HPLC*. Elsevier.
- Ananto, A. D., Lalu Undrus Y. M. G., & Lalu Sanik W. F. A. (2020). Analysis of BKO Content (Antalgin and Dexamethasone) in Herbal Medicine Using Iodometry Titration and HPLC Method. *Journal of Islamic Science and Technology*, 6(1). Available at: doi 10.22373/ekw.v6i1.5428.
- Asra, R., Zulharmita., & Yuliatim. (2018). Determination of Dexamethasone in Unregistered Herbal Weight Gain Using HPTLC-Densitometry. *Indonesian Journal of Pharmaceutical and Clinical Research*, 1(2), 21-27.
- Badan Pengawas Obat dan Makanan Republik Indonesia. (2022). Tentang Obat Tradisional Mengandung Bahan Kimia Obat, PW.02.04.1.4.10.22.166. Available at: <https://e-penjelasanpublikotsk.pom.go.id/>
- Gandjar, G. I., & Rohman, A. (2014). *Kimia Farmasi Analisis*. Yogyakarta. Pustaka Belajar.
- Hanifa, A., Yuyun, F., & Baiq, M. G. (2024). Analisis Kandungan Piroksikam dan Deksametason pada Jamu Pegal Linu yang Beredar di Lombok Timur. *Jurnal Farmasi Klinis dan Sains Bahan Alam*, 4(1). Available at: <https://doi.org/10.29408/sinteza.v4i1.17436>
- Hasan, R., Kuna, M. R., Ismail, S. A. (2023). Analisis Bahan Kimia Obat Dalam Jamu Pegal Linu Menggunakan Kromatografi Gas –Spektrometri Massa. *Jambura Journal of Health Science and Research*, 5(2), pp. 454. Available at: <https://doi.org/10.35971/jjhsr.v5i2.16876>.
- Harmita, 2004. Petunjuk Pelaksanaan Validasi dan Cara Penggunaannya. *Maj. Ilmu Kefarmasian* 1, 117.
- Husna, F. & Mita, S.R. (2020). Identification of Medicinal Chemicals in Traditional Male Stamina Medicine by Thin Layer Chromatography Method. *Farmaka*, 18(2)
- ICH, 2022. ICH guideline Q2 (R2) on validation of analytical procedures - Step 2b, Committee for Human Medicinal Products (CHMP): EMA/CHMP/ICH/82072/2006.
- Lucio-Gutiérrez, J. R., Coello, J. & MasPOCH, S. (2012) Enhanced Chromatographic Fingerprinting of Herb Materials by Multi-Wavelength Selection and Chemometrics. *Analytica Chimica Acta*; 710; 40–49. doi: 10.1016/j.aca.2011.10.010.
- Peraturan Menteri Kesehatan Republik Indonesia Nomor 007 Tahun 2012 Tentang Registrasi Obat Tradisional. Kementerian Kesehatan, Indonesia.

- Pratiwi, R., Rahmawaty, A., & Hasanah, A. N. (2022). Simple Analytical Method on The Determination of Dexamethasone in Herbal Medicine. *Journal of Spectroscopy*, pp. 1. Available at: <https://doi.org/10.1155/2022/5141647>.
- Purwanti, I., & Sudarsono. (2021). *Standarisasi Obat Herbal*. Yogyakarta. Gadjah Mada University Press.
- Riyanto. (2017). *Validasi & Verifikasi Metode Uji: Sesuai dengan ISO/IEC 17025 Laboratorium Pengujian dan Librasi*. Yogyakarta. Deeppublish.
- Rusli, et al. (2017). Tinjauan Pengetahuan Masyarakat Kecamatan Panca Rijang Kabupaten Sidrap Terhadap Penggunaan Obat Tradisional. *Media Kesehatan Politeknik Kesehatan Makassar*. 17(2), pp. 15-19. Available at: doi 10.32382/medkes.v12i2.246.
- Sidoretno, W, M., & Oktaviani, I. (2018). Edukasi Bahaya Bahan Kimia Obat Yang Terdapat Di Dalam Obat Tradisional. *Jurnal Pengabdian Masyarakat*, 1(2), pp. 37-38. Available at: <https://doi.org/10.36341/jpm.v1i2.453>.
- Sylvia, O. (2022). *Buku Ajar Obat Tradisional*. Medan: Guepedia. pp. 43-45.
- Tilaar, M. (1998). *Pandangan Industri Obat Tradisional Terhadap Penyediaan Simplisia Tanaman Obat dari Hasil Budidaya*. Jakarta: Direktorat Pengawasan Obat dan Makanan.

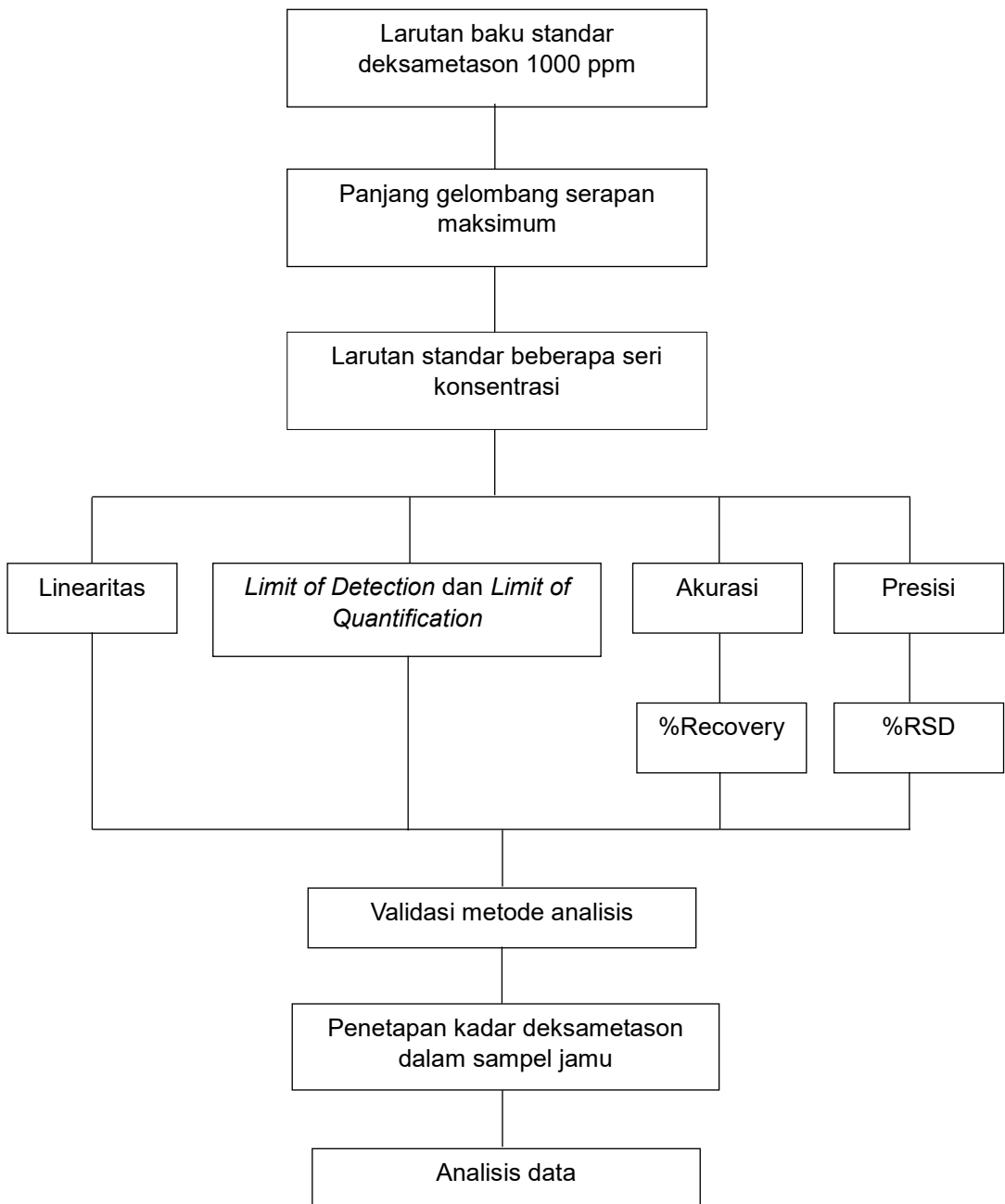
LAMPIRAN

Lampiran 1. Skema Kerja Penelitian

Lampiran 1. 1 Preparasi sampel dan analisis kualitatif dengan KLT




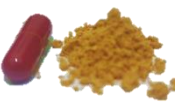








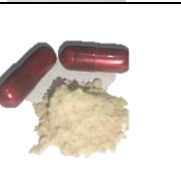

Lampiran 1. 2 Validasi metode analisis dan penetapan kadar Dekسامetason dalam sampel jamu pegal linu.



Lampiran 2. Uraian kandungan sampel

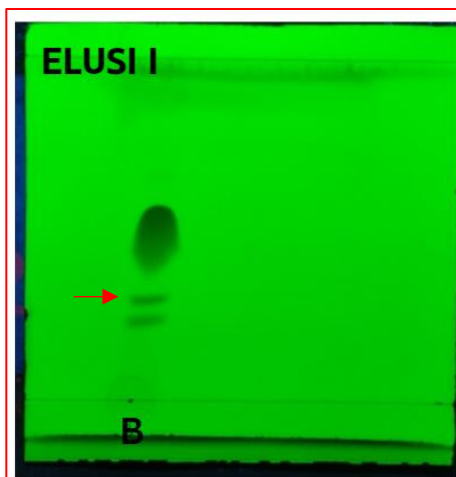
Tabel 7. Uraian kandungan sampel

Nama Sampel	Gambar Sampel	Komposisi sampel yang tertera pada kemasan	Kandungan bahan tanaman
A		Kaempferia rhizoma, Curcuma rhizoma, Retrofracti fructus, Zingiberis aromatica rhizoma, Zingiberis purpurae rhizoma	<i>Kaempferia galanga</i> , <i>Curcuma xanthorrhiza</i> (Roxb), <i>Piper retrofractum</i> fructus, <i>Zingiberis aromatica</i> rhizoma, <i>Zingiberis purpurae</i> rhizoma
B		Centella asiatica, Mimosa pudical, Phyllanthus urinarialinn, Sonchus arvesisi	<i>Centella asiatica</i> (L.), <i>Mimosa pudica</i> L., <i>Phyllanthus urinaria</i> L., <i>Sonchus arvensis</i> L.
C		Curcumae rhizoma, Zingiberis rhizoma, Zingiberis aromatica, Panax ginseng, royal jelly	<i>Curcumae rhizome</i> , <i>Zingiberis rhizoma</i> , <i>Zingiber aromatics</i> , <i>Panax ginseng</i> , <i>Apis mellifera</i>
D		Curcuma Xanthorriza, Zingiberis rhizoma, Ginan dropsis speciosa, Curcumae rhizoma, Alpina Galanga, Bengle	<i>Curcuma xanthorrhiza</i> , <i>Zingiberis rhizoma</i> , <i>Mitragyna speciosa</i> K., <i>Curcumae rhizome</i> , <i>Alpina galanga</i> , <i>Zingiber montanum</i>
E		Centella asiatica, Glaziosa superbball, Mimosa pudical, Phyllanthus urinarialinn, Sonchus arvesisi	<i>Centella asiatica</i> , <i>Glariosa superba</i> , <i>Mimosa pudical</i> , <i>Phyllanthus urinaria</i> L., <i>Sonchus arvensis</i> L.
F		Extract garcia, Phyllanthus urinarialinn, Glaziosa superbball, Annona muricata, Languatis rhizoma, Mimosa pudical	<i>Extract garcia</i> , <i>Phyllanthus urinaria</i> L., <i>Glariosa superba</i> , <i>Annona muricata</i> Linn, <i>Alpinia galanga</i> , <i>Mimosa pudica</i>
G		Pandanus conoideus, Epiphyllum oxipetalum Haw, Zingiberis rhizoma, Piper nigrum, Panax ginseng, Abrus pectorius L	<i>Pandanus conoideus</i> , <i>Epiphyllum oxipetalum</i> Haw, <i>Zingiberis rhizoma</i> , <i>Piper nigrum</i> , <i>Panax ginseng</i> , <i>Abrus pectorius</i> L.

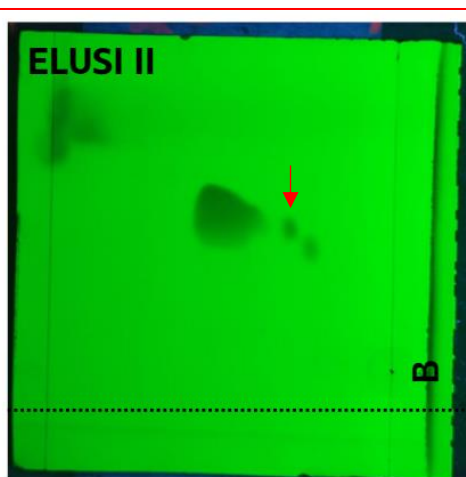
H		Physalis minimalunn, Nigella sativa, Curcuma zanthorrhiza	<i>Physalis minima</i> , <i>Nigella sativa</i> , <i>Curcuma xanthorrhiza</i>
I		Moringa oleifera, Phyllanthus urinarialiin, Talinum paniculatum, Eurycomae radix, Annona muricata, Mimsa pudical, Glaziosa superball, Extract garcia	<i>Moringa oleifera</i> , <i>Phyllanthus urinaria</i> L., <i>Talinum paniculatum</i> , <i>Eurycomae radix</i> , <i>Annona muricata</i> , <i>Mimosa pudica</i> , <i>Glariosa superba</i> , <i>Extract garcia</i>
J		Extract annona muricata, Curcuma zanthorrhiza	<i>Extract Annona muricata</i> , <i>Curcuma xanthorrhiza</i>
K		Extract garcia, Annona muricata, Phylanthus urinarialinn, Mimosa pudical, Languatis rhizoma, Glaziosa superbal	<i>Extract garcia</i> , <i>Annona muricata</i> , <i>Phyllanthus urinaria</i> L., <i>Mimosa pudica</i> , <i>Alpinia galanga</i> , <i>Glariosa superba</i>
L		Extract garcia, Zingiber officinale, Imperata cylindrica, Mimosa pudical, Languatis rhizoma	<i>Extract garcia</i> , <i>Zingiber officinale</i> , <i>Imperata cylindrical</i> L., <i>Mimosa pudica</i> , <i>Alpinia galanga</i>

Lampiran 3. Uji penegasan sampel positif menggunakan KLT dua dimensi

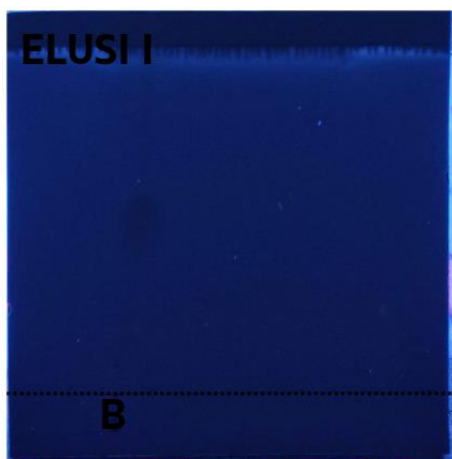
Noda deksametason : berwarna merah



Gambar 5. Elusi 1 sampel B dengan eluen kloroform:metanol (13:2) pada UV 254 nm



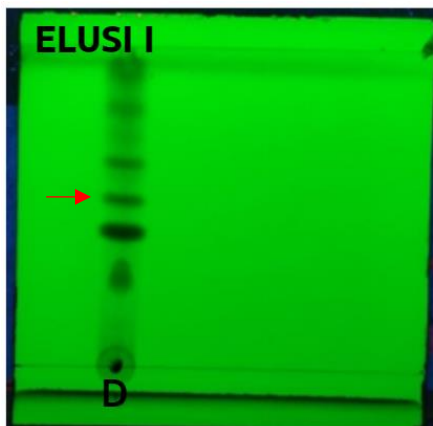
Gambar 6. Elusi 2 sampel B dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



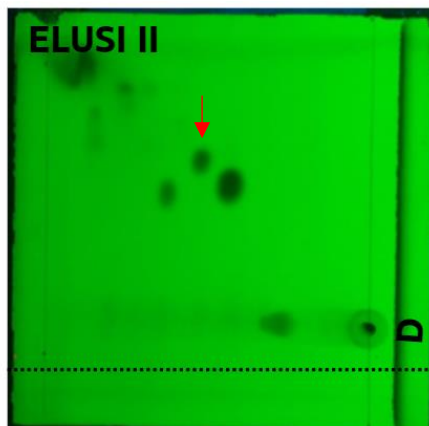
Gambar 7. Elusi 1 sampel B dengan eluen kloroform:metanol (13:2) pada UV 366 nm



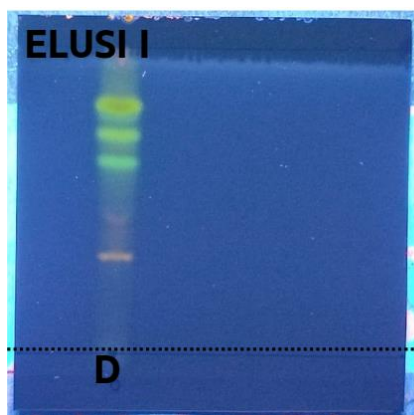
Gambar 8. Elusi 1 sampel B dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



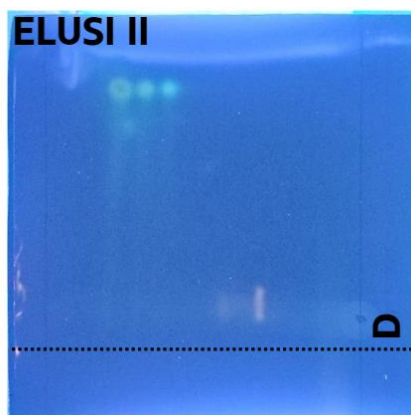
Gambar 9. Elusi 1 sampel D dengan eluen kloroform:metanol (13:2) pada UV 254 nm



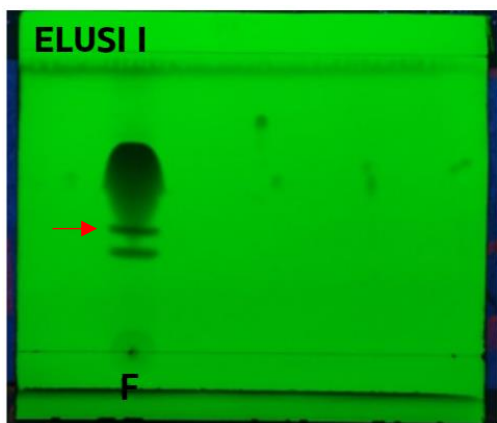
Gambar 10. Elusi 1 sampel D dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



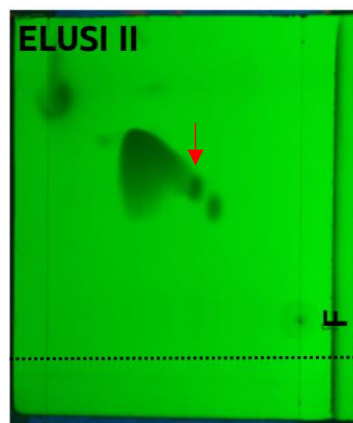
Gambar 11. Elusi 1 sampel D dengan eluen kloroform:metanol (13:2) pada UV 366 nm



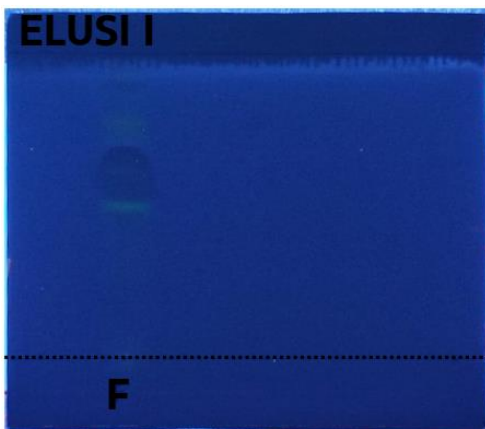
Gambar 12. Elusi 1 sampel D dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



Gambar 13. Elusi 1 sampel F dengan eluen kloroform:metanol (13:2) pada UV 254 nm



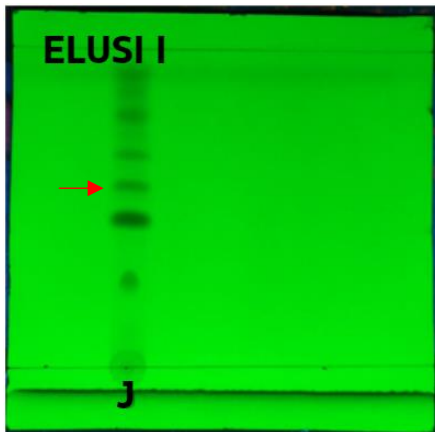
Gambar 14. Elusi 1 sampel F dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



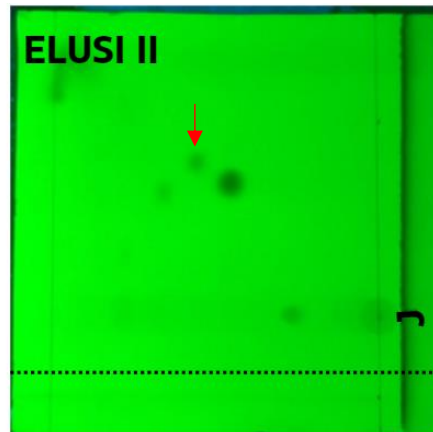
Gambar 15. Elusi 1 sampel F dengan eluen kloroform:metanol (13:2) pada UV 366 nm



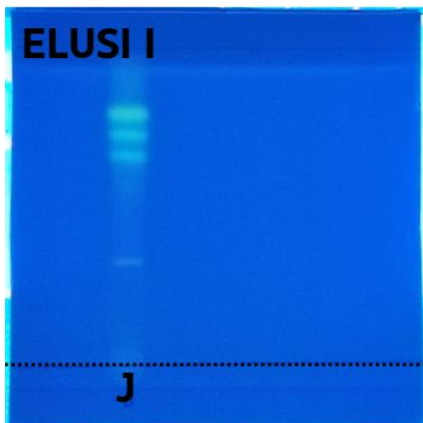
Gambar 16. Elusi 1 sampel F dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



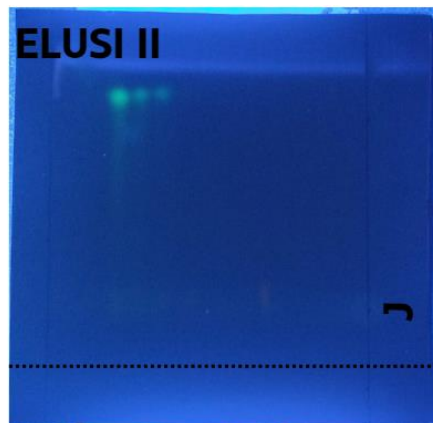
Gambar 17. Elusi 1 sampel J dengan eluen kloroform:metanol (13:2) pada UV 254 nm



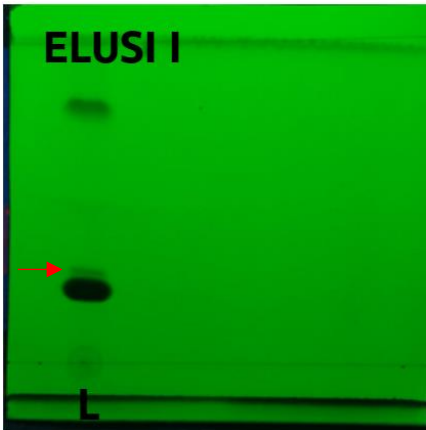
Gambar 18. Elusi 1 sampel J dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



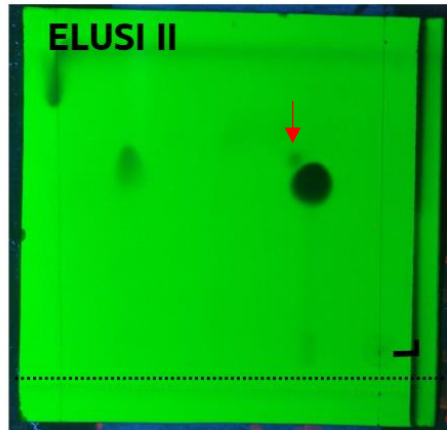
Gambar 19. Elusi 1 sampel J dengan eluen kloroform:metanol (13:2) pada UV 366 nm



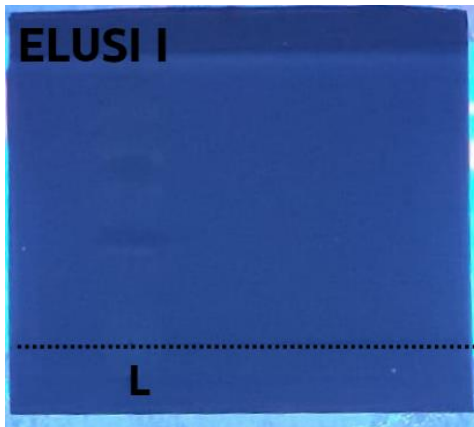
Gambar 20. Elusi 1 sampel J dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



Gambar 21. Elusi 1 sampel L dengan eluen kloroform:metanol (13:2) pada UV 254 nm



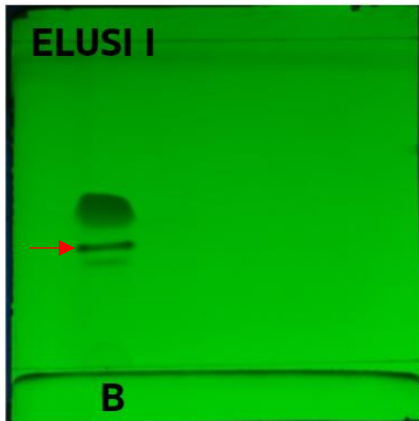
Gambar 22. Elusi 1 sampel L dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



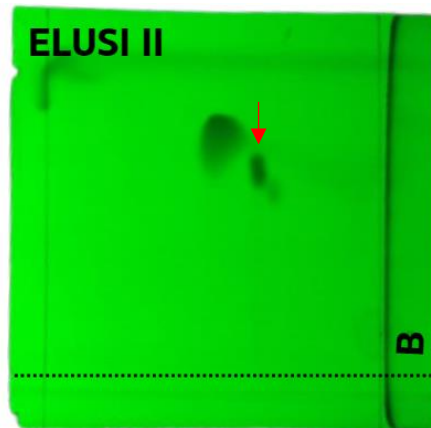
Gambar 23. Elusi 1 sampel L dengan eluen kloroform:metanol (13:2) pada UV 366 nm



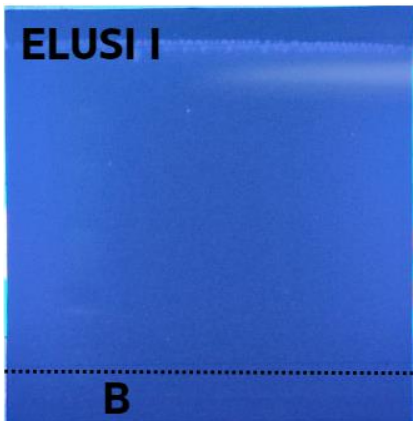
Gambar 24. Elusi 1 sampel L dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



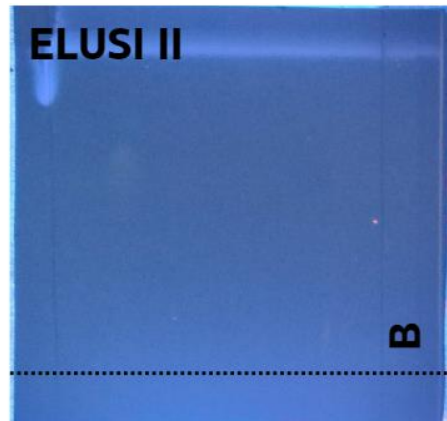
Gambar 25. Elusi 1 sampel B spiked Deksametason dengan eluen kloroform:metanol (13:2) pada UV 254 nm



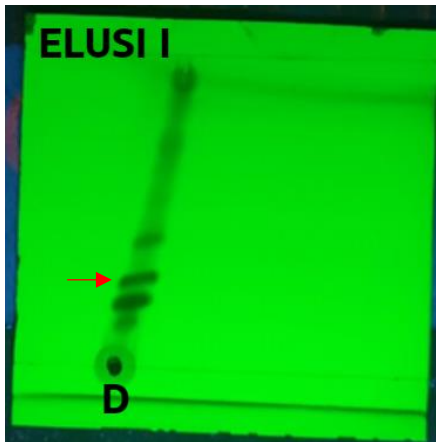
Gambar 26. Elusi 1 sampel B spiked Deksametason dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



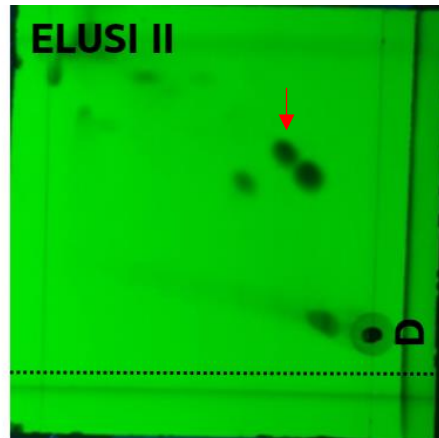
Gambar 27. Elusi 1 sampel B spiked Deksametason dengan eluen kloroform:metanol (13:2) pada UV 366 nm



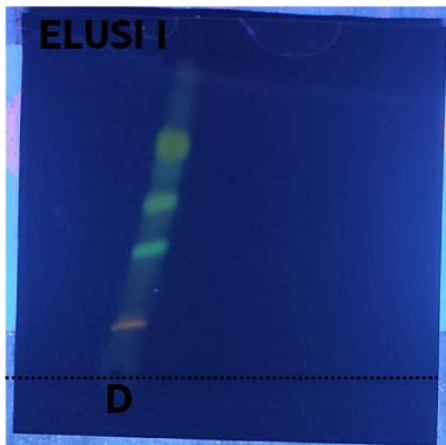
Gambar 28. Elusi 1 sampel B spiked Deksametason dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



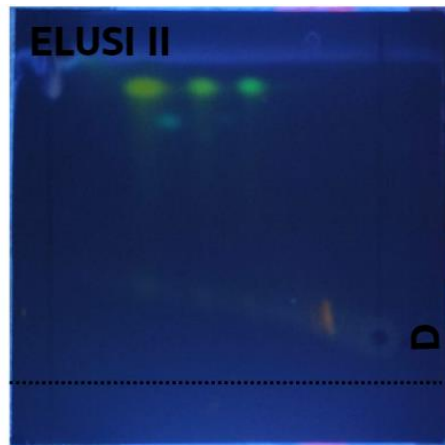
Gambar 29. Elusi 1 sampel D spiked Dekسامetason dengan eluen kloroform:metanol (13:2) pada UV 254 nm



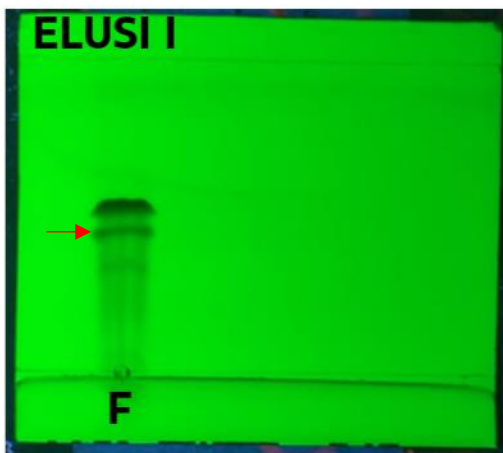
Gambar 30. Elusi 1 sampel D spiked Dekسامetason dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



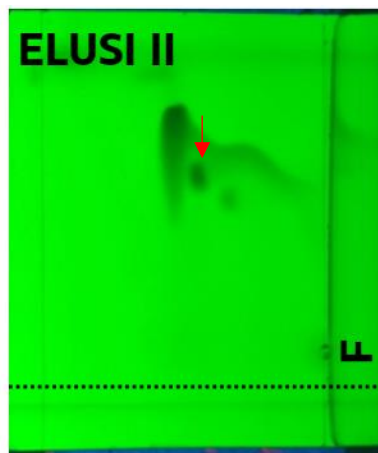
Gambar 31. Elusi 1 sampel B spiked Dekسامetason dengan eluen kloroform:metanol (13:2) pada UV 366 nm



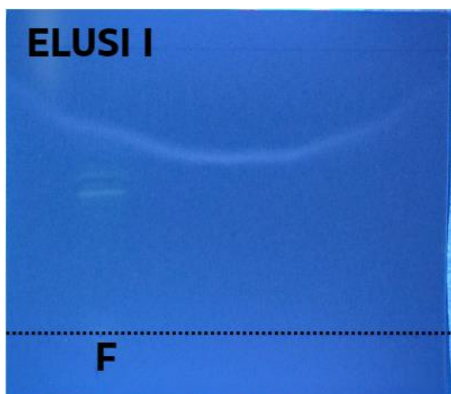
Gambar 32. Elusi 1 sampel B spiked Dekسامetason dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



Gambar 33. Elusi 1 sampel F spiked Deksametason dengan eluen kloroform:metanol (13:2) pada UV 254 nm



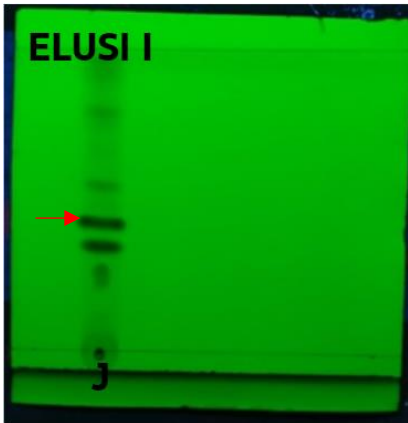
Gambar 34. Elusi 1 sampel F spiked Deksametason dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



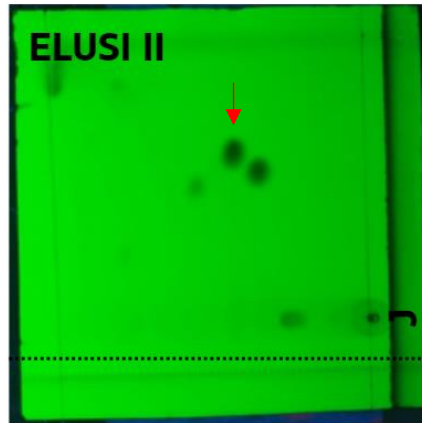
Gambar 35. Elusi 1 sampel F spiked Deksametason dengan eluen kloroform:metanol (13:2) pada UV 366 nm



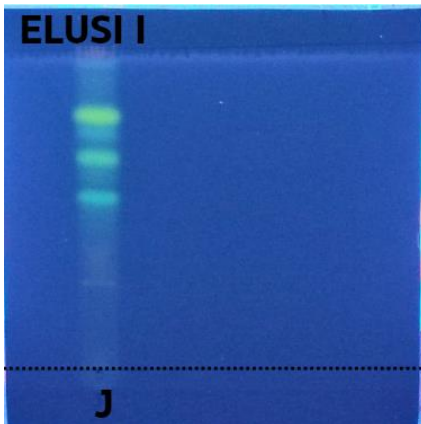
Gambar 36. Elusi 1 sampel F spiked Deksametason dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



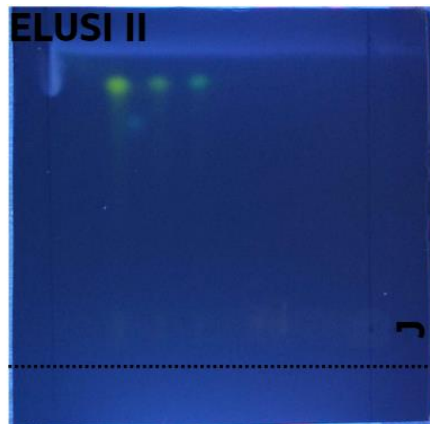
Gambar 37. Elusi 1 sampel J spiked Deksametason dengan eluen kloroform:metanol (13:2) pada UV 254 nm



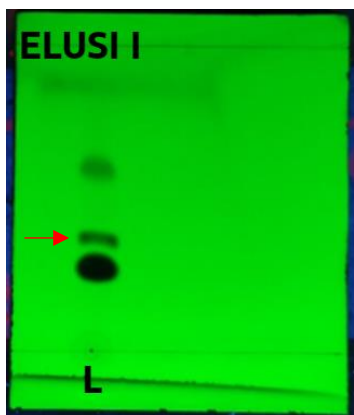
Gambar 38. Elusi 1 sampel J spiked Deksametason dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



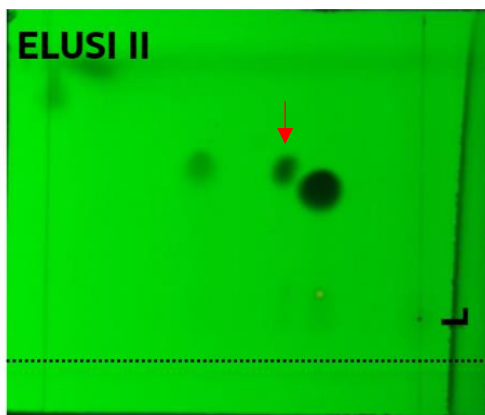
Gambar 39. Elusi 1 sampel J spiked Deksametason dengan eluen kloroform:metanol (13:2) pada UV 366 nm



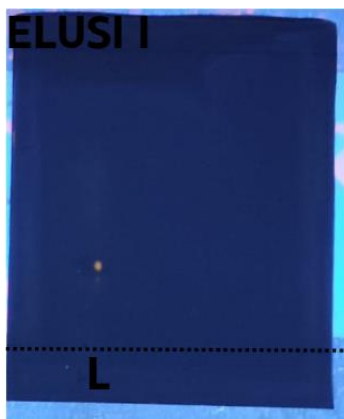
Gambar 40. Elusi 1 sampel J spiked Deksametason dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm



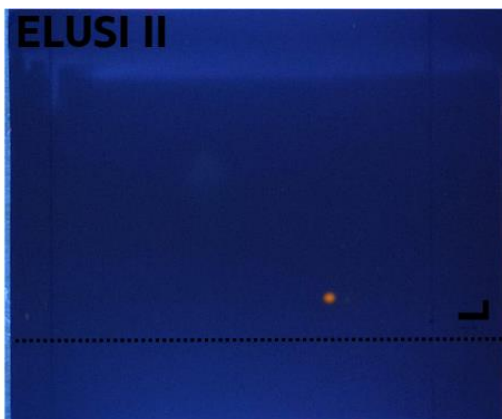
Gambar 41. Elusi 1 sampel L spiked Deksametason dengan eluen kloroform:metanol (13:2) pada UV 254 nm



Gambar 42. Elusi 1 sampel L spiked Deksametason dengan eluen kloroform:etil asetat (3:12) pada UV 254 nm



Gambar 43. Elusi 1 sampel L spiked Deksametason dengan eluen kloroform:metanol (13:2) pada UV 366 nm



Gambar 44. Elusi 1 sampel L spiked Deksametason dengan eluen kloroform:etil asetat (3:12) pada UV 366 nm

Lampiran 4. Perhitungan dan pengolahan data penelitian

Lampiran 4. 1 Perhitungan Nilai Rf

$$\text{Nilai Rf baku deksametason} = \frac{\text{Jarak yang ditempuh noda}}{\text{jarak eluen}} = \frac{4,1}{8,6} = 0,47$$

$$\text{Nilai Rf sampel B} = \frac{\text{Jarak yang ditempuh noda}}{\text{jarak eluen}} = \frac{4,3}{8,6} = 0,5$$

$$\text{Nilai Rf sampel D} = \frac{\text{Jarak yang ditempuh noda}}{\text{jarak eluen}} = \frac{4,2}{8,6} = 0,48$$

$$\text{Nilai Rf sampel F} = \frac{\text{Jarak yang ditempuh noda}}{\text{jarak eluen}} = \frac{4,1}{8,6} = 0,47$$

$$\text{Nilai Rf baku sampel J} = \frac{\text{Jarak yang ditempuh noda}}{\text{jarak eluen}} = \frac{4,1}{8,6} = 0,47$$

$$\text{Nilai Rf baku sampel L} = \frac{\text{Jarak yang ditempuh noda}}{\text{jarak eluen}} = \frac{4,2}{8,6} = 0,48$$

Lampiran 3. 2 Perhitungan hasil uji akurasi

$$\% \text{Recovery} = \frac{\text{konsentrasi yang diperoleh}}{\text{konsentrasi sesungguhnya}} \times 100\%$$

Perhitungan *percent recovery* baku 100 ppm replikasi

$$\% \text{Recovery X1} = \frac{102,500}{100} \times 100\% = 102,500\%$$

$$\% \text{Recovery X2} = \frac{102,432}{100} \times 100\% = 102,432\%$$

$$\% \text{Recovery X3} = \frac{103,448}{100} \times 100\% = 103,448\%$$

Perhitungan *percent recovery* baku 300 ppm

$$\% \text{Recovery X1} = \frac{302,865}{300} \times 100\% = 100,955\%$$

$$\% \text{Recovery X2} = \frac{299,967}{300} \times 100\% = 99,989\%$$

$$\% \text{Recovery X3} = \frac{298,192}{300} \times 100\% = 99,397\%$$

Perhitungan *percent recovery* baku 500 ppm

$$\% \text{Recovery X1} = \frac{515,482}{500} \times 100\% = 103,096\%$$

$$\% \text{Recovery X2} = \frac{515,110}{500} \times 100\% = 103,022\%$$

$$\% \text{Recovery X3} = \frac{513,593}{500} \times 100\% = 102,719\%$$

Lampiran 2. 3 Perhitungan hasil uji presisi

$$\% \text{RSD} = \frac{\text{SD}}{\text{rata-rata}} \times 100\%$$

Perhitungan %RSD baku 100 ppm

$$\% \text{RSD} = \frac{8,39}{1884,733} \times 100\% = 0,45\%$$

Perhitungan %RSD baku 300 ppm

$$\%RSD = \frac{34,831}{4801,333} \times 100\% = 0,7\%$$

Perhitungan %RSD baku 500 ppm

$$\%RSD = \frac{14,778}{7966,967} \times 100\% = 0,185\%$$

Lampiran 4. 4 Perhitungan hasil penetapan kadar Deksametason dalam sampel pegal linu

Persamaan linearitas $y = 14,766x + 366,49$

Konsentrasi sampel B = 3000 $\mu\text{g/mL}$

Konsentrasi sampel D, F, dan J = 2000 $\mu\text{g/mL}$

Konsentrasi sampel L = 3100 $\mu\text{g/mL}$

$$\%Kadar = \frac{\text{konsentrasi deksametason } (\mu\text{g/mL})}{\text{konsentrasi sampel } (\mu\text{g/mL})} \times 100\%$$

Perhitungan kadar deksametason dalam sampel B

$$\%Kadar B1 = \frac{233,855 \mu\text{g/mL}}{3000 \mu\text{g/mL}} \times 100\% = 7,795\%$$

$$\%Kadar B2 = \frac{228,756 \mu\text{g/mL}}{3000 \mu\text{g/mL}} \times 100\% = 7,625\%$$

$$\%Kadar B3 = \frac{218,191 \mu\text{g/mL}}{3000 \mu\text{g/mL}} \times 100\% = 7,273\%$$

$$\text{Rata-rata \%Kadar B} = \frac{7,795\% + 7,625\% + 7,273\%}{3} = 7,564\%$$

Perhitungan kadar deksametason dalam sampel D

$$\%Kadar D1 = \frac{322,241 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 16,112\%$$

$$\%Kadar D2 = \frac{344,088 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 17,204\%$$

$$\%Kadar D3 = \frac{362,441 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 18,122\%$$

$$\text{Rata-rata \%Kadar D} = \frac{16,112\% + 17,204\% + 18,122\%}{3} = 17,146\%$$

Perhitungan kadar deksametason dalam sampel F

$$\%Kadar F3 = \frac{209,990 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 10,499\%$$

$$\%Kadar F3 = \frac{249,195 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 12,459\%$$

$$\%Kadar F3 = \frac{245,043 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 12,252\%$$

$$\text{Rata-rata \%Kadar F} = \frac{10,499\% + 12,459\% + 12,252\%}{3} = 11,737\%$$

Perhitungan kadar deksametason dalam sampel J

$$\%Kadar J1 = \frac{237,479 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 11,874\%$$

$$\%Kadar J2 = \frac{223,636 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 11,182\%$$

$$\%Kadar J3 = \frac{232,562 \mu\text{g/mL}}{2000 \mu\text{g/mL}} \times 100\% = 11,628\%$$

$$\text{Rata-rata \%Kadar J} = \frac{11,874\% + 11,182\% + 11,628\%}{3} = 11,561\%$$

Perhitungan kadar deksametason dalam sampel L

$$\%Kadar L1 = \frac{94,420 \mu\text{g/mL}}{3100 \mu\text{g/mL}} \times 100\% = 3,045\%$$

$$\%Kadar L2 = \frac{105,419 \mu\text{g/mL}}{3100 \mu\text{g/mL}} \times 100\% = 3,400\%$$

$$\%Kadar L3 = \frac{113,864 \mu\text{g/mL}}{3100 \mu\text{g/mL}} \times 100\% = 3,673\%$$

$$\text{Rata-rata \%Kadar J} = \frac{3,147\% + 3,514\% + 3,795\%}{3} = 3,373\%$$

Lampiran 5. Hasil analisis KLT Densitometri

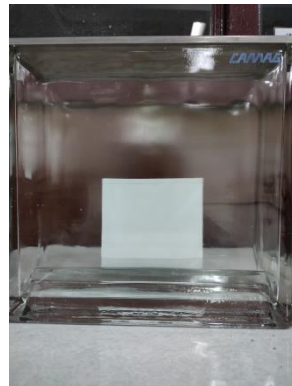
Gambar 9. Penimbangan sampel jamu pegal linu



Gambar 10. Proses preparasi sampel jamu pegal linu



Gambar 11. Proses penyaringan



Gambar 12. Proses elusi lempeng

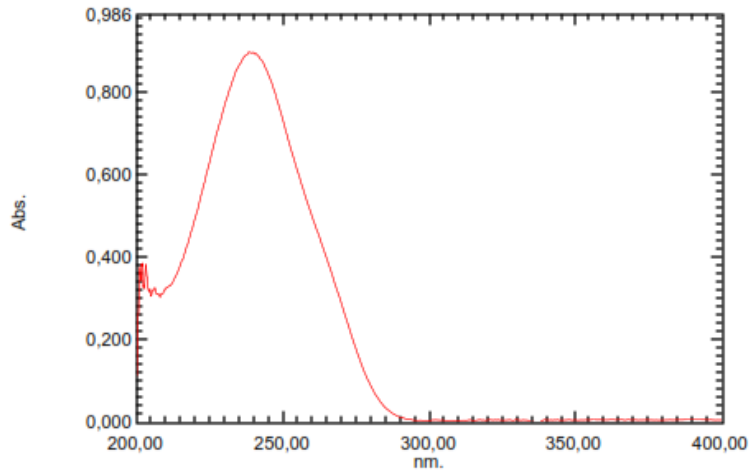


Gambar 13. Pembuatan kurva baku



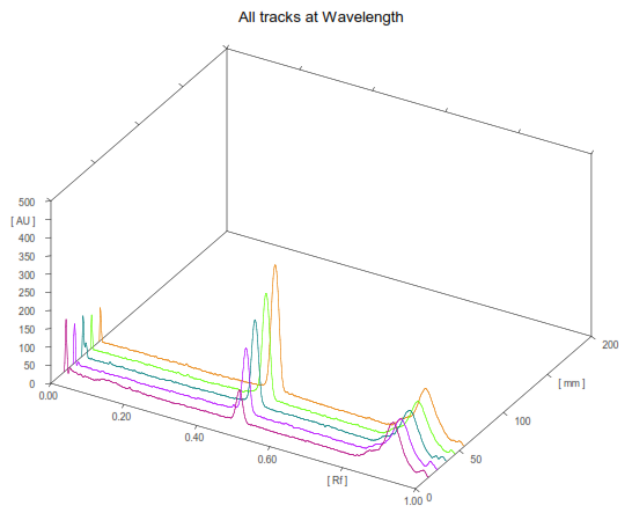
Gambar 14. Pengukuran menggunakan TLC-Scanner

Lampiran 6. Hasil analisis KLT Densitometri
Lampiran 6. 1 Panjang gelombang maksimum



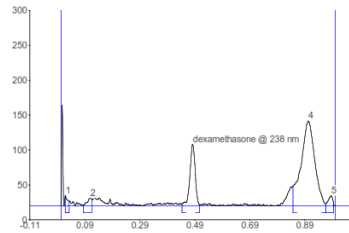
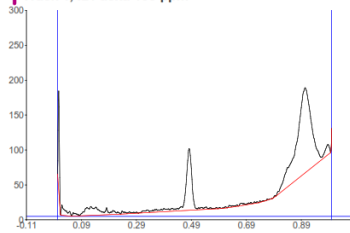
No.	P/V	Wavelength	Abs.	Description
1	📍	368,00	0,005	
2	📍	364,60	0,006	
3	📍	356,40	0,005	
4	📍	349,80	0,005	
5	📍	339,20	0,005	
6	📍	330,00	0,005	
7	📍	317,20	0,005	
8	📍	313,80	0,004	
9	📍	302,00	0,004	
10	📍	238,40	0,896	
11	📍	206,20	0,324	
12	📍	202,00	0,384	

Lampiran 6. 2 Linearitas



- Konsentrasi 100 ppm

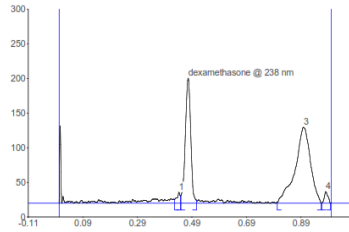
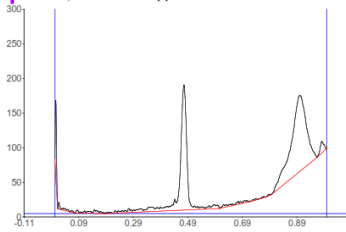
Track 1, ID: dexa 100 ppm



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.02	14.8	0.02	15.3	6.07	0.03	6.2	127.2	1.57	unknown *
2	0.08	1.0	0.11	11.2	4.45	0.11	9.9	182.6	2.26	unknown *
3	0.44	2.8	0.48	88.4	35.14	0.50	2.2	1669.8	20.65	dexamethasone
4	0.85	28.4	0.90	121.9	48.45	0.97	3.2	5879.3	72.72	unknown *
5	0.97	3.3	0.99	14.8	5.90	0.99	4.5	226.5	2.80	unknown *

- Konsentrasi 200 ppm

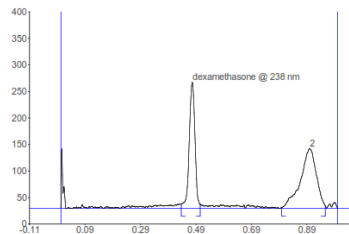
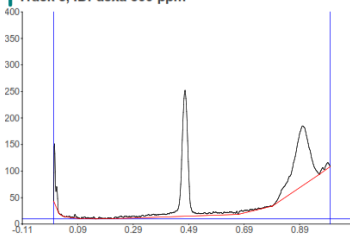
Track 2, ID: dexa 200 ppm



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.42	5.8	0.44	16.0	4.96	0.45	10.8	188.3	1.90	unknown *
2	0.45	11.2	0.47	180.6	55.83	0.50	4.8	3509.8	35.38	dexamethasone
3	0.80	1.1	0.90	109.8	33.95	0.96	0.3	6001.1	60.50	unknown *
4	0.97	0.3	0.98	17.0	5.26	1.00	0.6	219.9	2.22	unknown *

- Konsentrasi 300 ppm

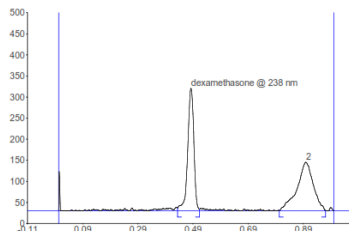
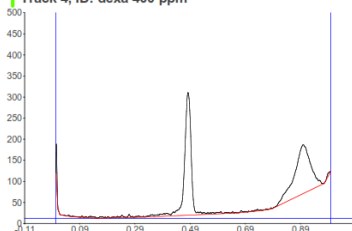
Track 3, ID: dexa 300 ppm



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.44	8.1	0.47	237.5	67.87	0.50	7.2	4825.6	43.49	dexamethasone
2	0.80	1.4	0.90	112.4	32.13	0.96	4.7	6270.8	56.51	unknown *

- Konsentrasi 400 ppm

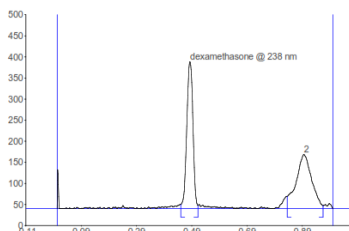
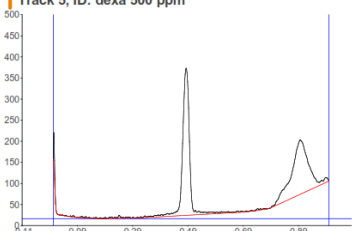
Track 4, ID: dexa 400 ppm



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.43	7.2	0.48	291.2	71.56	0.51	4.6	6337.7	48.75	dexamethasone
2	0.80	1.0	0.90	115.8	28.44	0.97	1.3	6663.7	51.25	unknown *

- Konsentrasi 500 ppm

Track 5, ID: dexa 500 ppm

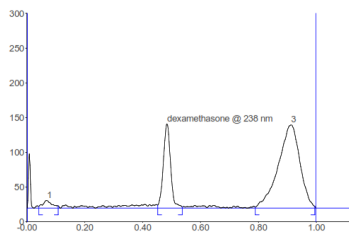
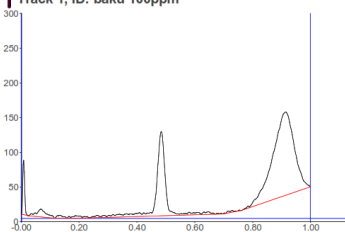


Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.45	10.0	0.48	348.7	72.98	0.51	7.5	7639.0	51.91	dexamethasone
2	0.83	29.1	0.89	129.1	27.02	0.96	7.4	7077.0	48.09	unknown *

Lampiran 6. 3 Akurasi dan Presisi

- Konsentrasi 100 ppm replikasi 1

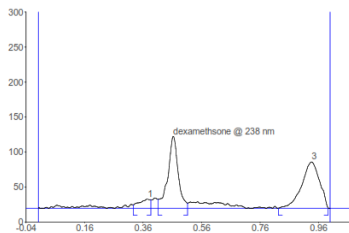
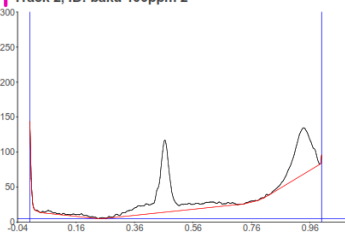
Track 1, ID: baku 100ppm



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.04	2.7	0.07	11.1	4.42	0.11	3.3	223.6	2.92	unknown *
2	0.45	4.3	0.48	121.2	48.06	0.54	1.9	1880.9	24.58	dexamethasone
3	0.79	1.6	0.91	119.9	47.52	1.00	2.6	5546.6	72.49	unknown *

- Konsentrasi 100 ppm replikasi 2

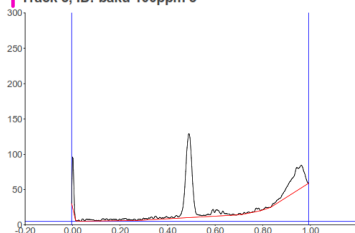
Track 2, ID: baku 100ppm 2



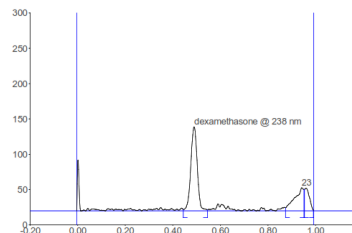
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.33	5.1	0.37	13.2	7.21	0.39	12.3	268.6	6.34	unknown *
2	0.41	12.8	0.46	102.8	56.37	0.51	7.2	1879.3	44.35	dexamethasone
3	0.82	0.0	0.94	66.4	36.41	0.99	0.1	2089.5	49.31	unknown *

- Konsentrasi 100 ppm replikasi 3

Track 3, ID: baku 100ppm 3



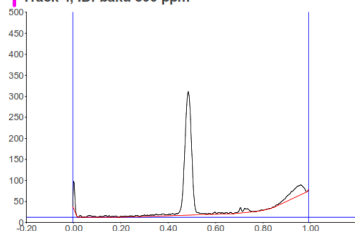
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height
1	0.45	1.9	0.50	119.0	64.69	0.55	1.7
2	0.88	4.3	0.95	32.9	17.90	0.96	30.3
3	0.96	30.4	0.97	32.0	17.40	1.00	0.8



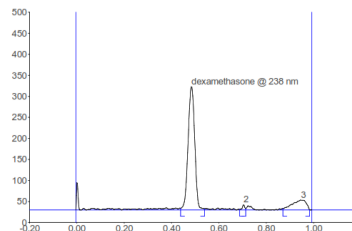
Area	Area %	Assigned substance
1894.0	62.60	dexamethasone
741.7	24.51	unknown *
390.1	12.89	unknown *

- Konsentrasi 300 ppm replikasi 1

Track 4, ID: baku 300 ppm



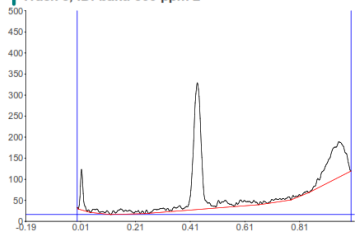
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height
1	0.44	4.3	0.49	293.5	88.99	0.54	3.1
2	0.69	1.4	0.71	12.6	3.82	0.72	3.3
3	0.88	3.5	0.95	23.7	7.19	0.99	0.4



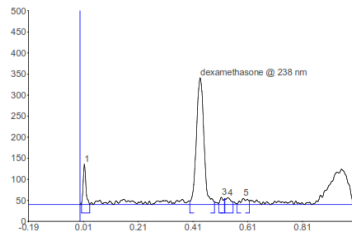
Area	Area %	Assigned substance
4838.6	84.19	dexamethasone
79.8	1.39	unknown *
828.8	14.42	unknown *

- Konsentrasi 300 ppm Replikasi 2

Track 5, ID: baku 300 ppm 2



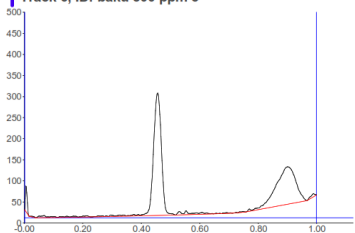
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height
1	0.01	3.7	0.02	96.3	21.61	0.04	1.0
2	0.40	8.4	0.44	301.0	67.54	0.49	6.4
3	0.51	3.2	0.52	17.1	3.84	0.53	13.2
4	0.53	14.2	0.54	16.4	3.67	0.56	6.6
5	0.57	1.3	0.60	14.9	3.34	0.62	9.1



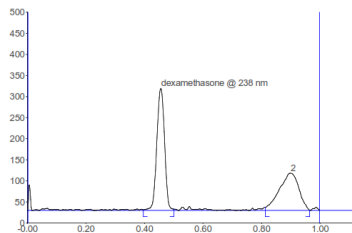
Area	Area %	Assigned substance
545.8	9.28	unknown *
4795.8	81.56	dexamethasone
125.6	2.14	unknown *
193.3	3.29	unknown *
219.3	3.73	unknown *

- Konsentrasi 300 ppm replikasi 3

Track 6, ID: baku 300 ppm 3



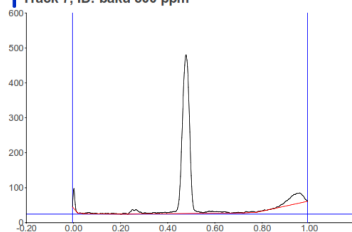
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height
1	0.40	1.7	0.46	290.3	76.59	0.50	3.3
2	0.81	7.8	0.90	88.7	23.41	0.97	0.4



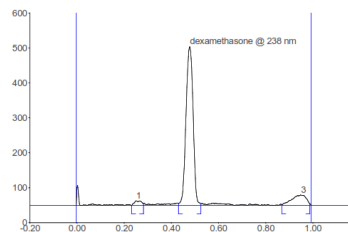
Area	Area %	Assigned substance
4769.6	56.47	dexamethasone
3677.2	43.53	unknown *

- Konsentrasi 500 ppm replikasi 1

Track 7, ID: baku 500 ppm



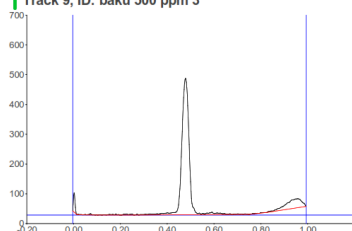
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height
1	0.24	0.4	0.25	13.0	2.61	0.29	5.2
2	0.44	5.8	0.48	454.2	91.42	0.53	4.8
3	0.87	2.1	0.96	29.7	5.97	0.99	4.5



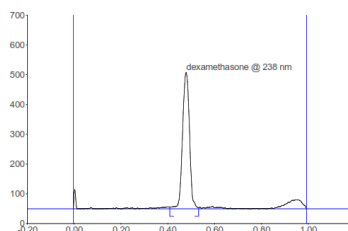
Area	Area %	Assigned substance
225.4	2.43	unknown *
7978.1	86.01	dexamethasone
1072.0	11.56	unknown *

- Konsentrasi 500 ppm replikasi 2

Track 9, ID: baku 500 ppm 3



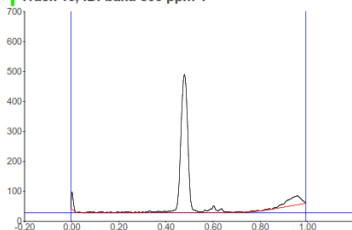
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height
1	0.41	5.8	0.48	458.5	100.00	0.54	3.7



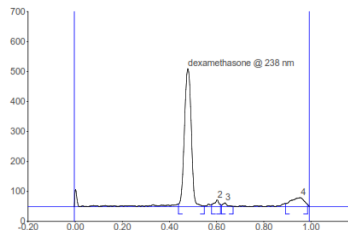
Area	Area %	Assigned substance
7972.6	100.00	dexamethasone

- Konsentrasi 500 ppm replikasi 3

Track 10, ID: baku 500 ppm 4



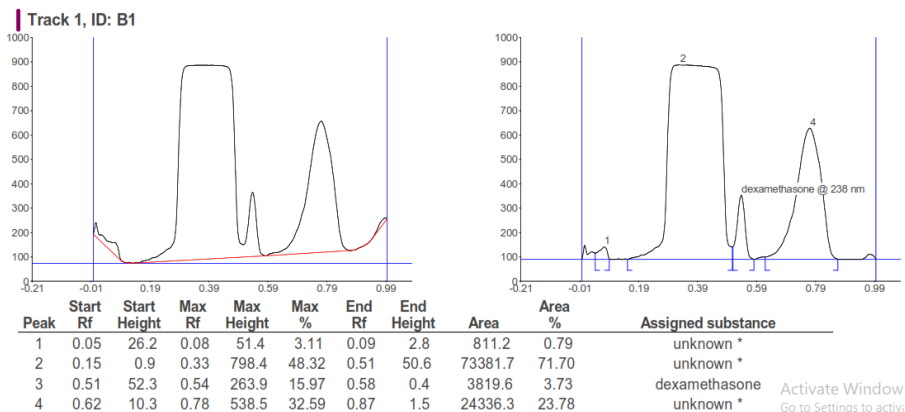
Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height
1	0.44	9.0	0.48	460.4	87.63	0.55	2.2
2	0.58	7.0	0.61	22.6	4.31	0.62	7.1
3	0.63	5.6	0.64	12.6	2.40	0.68	1.1
4	0.90	10.1	0.96	29.8	5.67	0.99	7.4



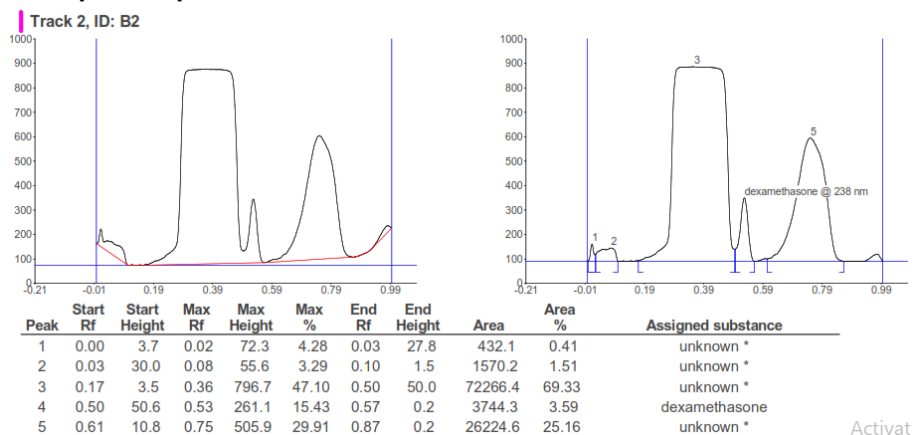
Area	Area %	Assigned substance
7805.4	84.94	dexamethasone
254.6	2.77	unknown *
140.3	1.53	unknown *
988.9	10.76	unknown *

Lampiran 6. 4 Hasil Penetapan Kadar Deksametason dalam Sampel

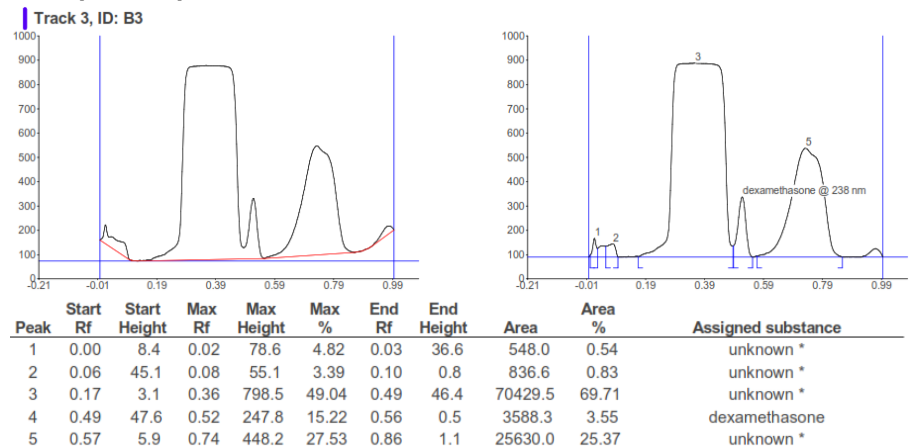
- Sampel B replikasi 1



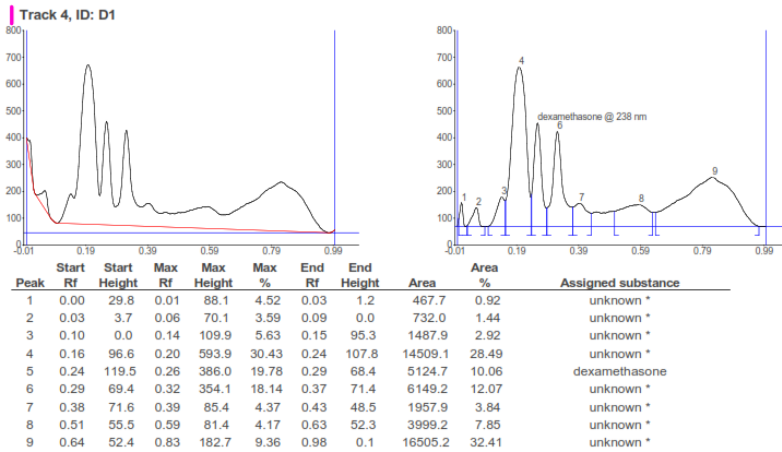
- Sampel B replikasi 2



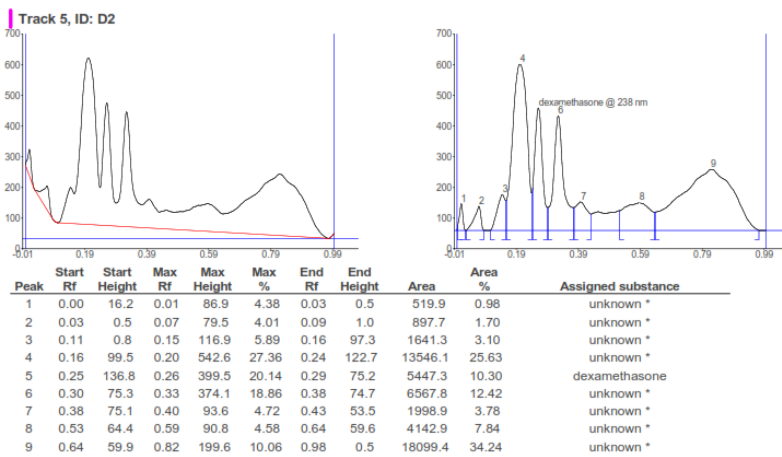
- Sampel B replikasi 3



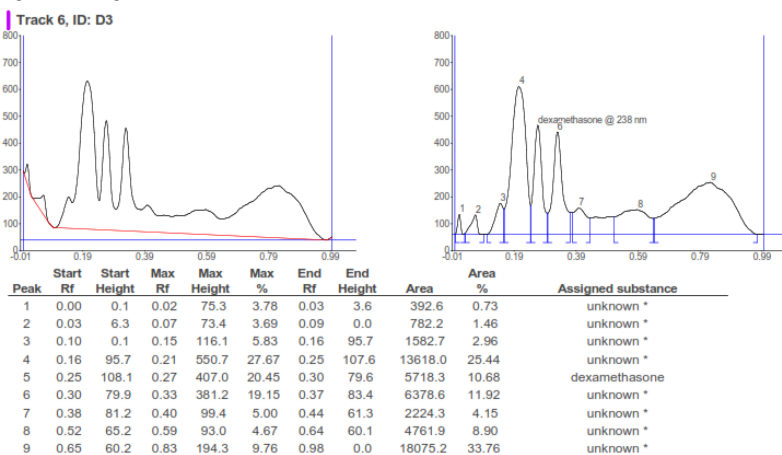
- Sampel D replikasi 1



- Sampel D replikasi 2

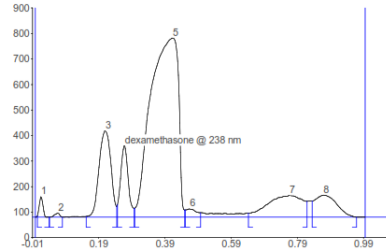
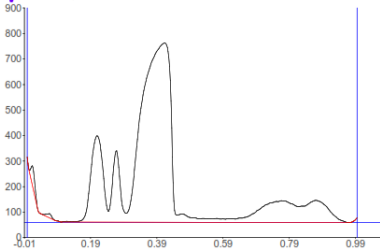


- Sampel D replikasi 3



- Sampel F replikasi 1

Track 7, ID: F1

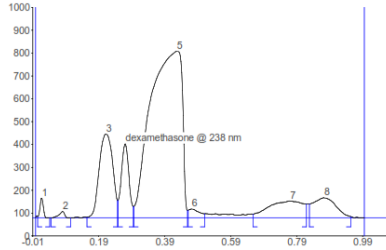
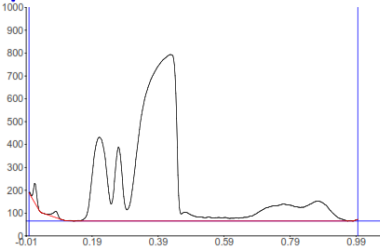


Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.01	5.9	0.02	80.1	4.94	0.04	0.0	478.1	0.94	unknown *
2	0.04	0.3	0.07	16.5	1.02	0.08	0.4	135.4	0.27	unknown *
3	0.15	3.1	0.21	338.1	20.85	0.25	42.5	6603.4	12.99	unknown *
4	0.25	50.2	0.27	279.7	17.25	0.30	34.8	3467.2	6.82	dexamethasone
5	0.30	35.3	0.42	702.7	43.33	0.45	28.2	31537.3	62.04	unknown *
6	0.46	28.6	0.47	32.7	2.02	0.50	17.6	575.3	1.13	unknown *
7	0.65	16.5	0.77	85.3	5.26	0.82	62.7	4912.1	9.66	unknown *
8	0.84	63.9	0.87	86.8	5.35	0.97	0.0	3122.3	6.14	unknown *

Activat

- Sampel F replikasi 2

Track 8, ID: F2

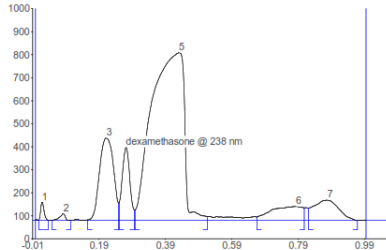
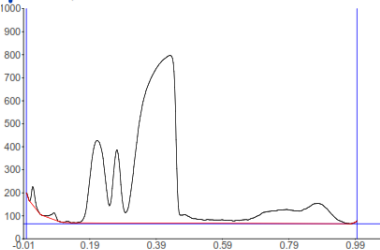


Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.01	5.4	0.02	85.8	4.95	0.04	0.4	461.4	0.79	unknown *
2	0.05	0.3	0.08	28.4	1.64	0.11	0.6	244.0	0.42	unknown *
3	0.16	2.1	0.21	366.4	21.14	0.25	75.3	8086.0	13.87	unknown *
4	0.25	76.5	0.27	323.7	18.68	0.30	49.3	4046.1	6.94	dexamethasone
5	0.30	49.5	0.43	728.4	42.03	0.46	31.0	37362.6	64.07	unknown *
6	0.46	32.1	0.48	38.7	2.24	0.51	17.7	695.5	1.19	unknown *
7	0.66	16.2	0.77	74.1	4.28	0.82	59.8	4142.5	7.10	unknown *
8	0.83	60.3	0.88	87.4	5.05	0.96	4.9	3277.0	5.62	unknown *

Activat

- Sampel F replikasi 3

Track 9, ID: F3

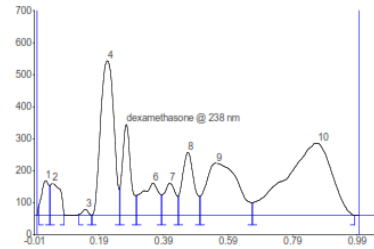
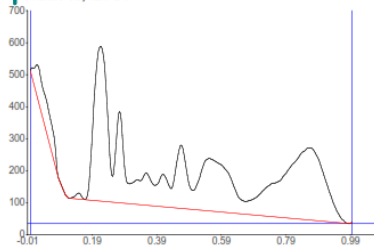


Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.01	0.8	0.02	79.8	4.80	0.04	0.4	433.5	0.75	unknown *
2	0.05	0.1	0.08	29.5	1.77	0.11	0.2	262.0	0.45	unknown *
3	0.16	2.6	0.21	357.7	21.51	0.25	75.0	8160.1	14.11	unknown *
4	0.25	78.9	0.27	317.4	19.09	0.30	45.0	3984.8	6.89	dexamethasone
5	0.30	45.3	0.43	728.9	43.84	0.52	17.1	38261.1	66.14	unknown *
6	0.67	15.1	0.79	60.8	3.66	0.81	55.2	3162.1	5.47	unknown *
7	0.83	54.3	0.88	88.6	5.33	0.97	0.8	3584.6	6.20	unknown *

Activat
Go to Set

- Sampel J replikasi 1

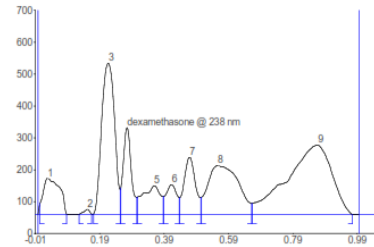
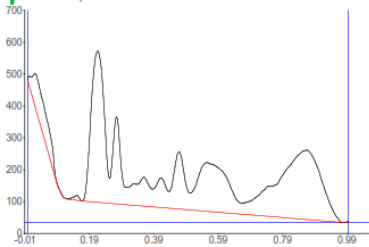
Track 10, ID: J1



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.01	34.1	0.03	109.9	6.15	0.04	93.5	1349.0	2.60	unknown *
2	0.04	94.5	0.05	100.1	5.60	0.08	3.8	1638.9	3.15	unknown *
3	0.13	3.1	0.15	18.9	1.06	0.17	1.0	188.6	0.36	unknown *
4	0.17	1.3	0.22	483.8	27.05	0.26	80.8	10628.5	20.46	unknown *
5	0.26	87.5	0.28	285.0	15.94	0.31	62.4	3873.1	7.46	dexamethasone
6	0.31	62.7	0.36	101.6	5.68	0.39	64.6	2832.4	5.45	unknown *
7	0.39	64.7	0.41	101.2	5.66	0.44	59.4	1928.3	3.71	unknown *
8	0.44	61.3	0.47	197.7	11.05	0.51	59.6	3852.2	7.42	unknown *
9	0.51	60.1	0.56	164.1	9.18	0.67	39.9	8492.5	16.35	unknown *
10	0.67	40.1	0.87	226.0	12.64	0.99	0.6	17161.5	33.04	unknown *

- Sampel J replikasi 2

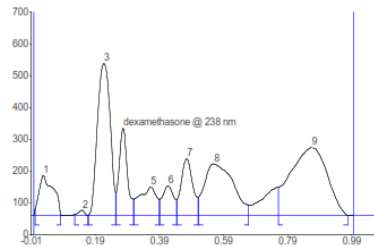
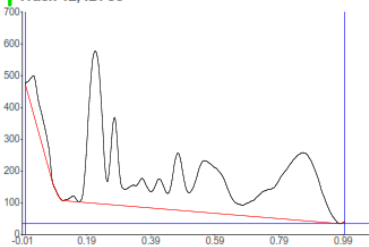
Track 11, ID: J2



Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.01	34.2	0.03	113.3	7.04	0.09	0.7	3098.8	6.34	unknown *
2	0.13	0.2	0.15	16.0	0.99	0.17	1.0	150.6	0.31	unknown *
3	0.17	1.7	0.22	474.3	29.45	0.26	78.0	10258.3	20.99	unknown *
4	0.26	83.4	0.28	272.7	16.93	0.31	54.1	3668.7	7.51	dexamethasone
5	0.31	54.7	0.36	90.5	5.62	0.39	56.0	2625.0	5.37	unknown *
6	0.39	56.6	0.42	93.3	5.79	0.44	52.4	1691.2	3.46	unknown *
7	0.44	52.8	0.47	179.4	11.14	0.51	52.7	3426.3	7.01	unknown *
8	0.51	53.6	0.56	153.0	9.50	0.67	34.2	7795.3	15.95	unknown *
9	0.67	34.4	0.87	218.0	13.53	0.98	0.2	16152.1	33.05	unknown *

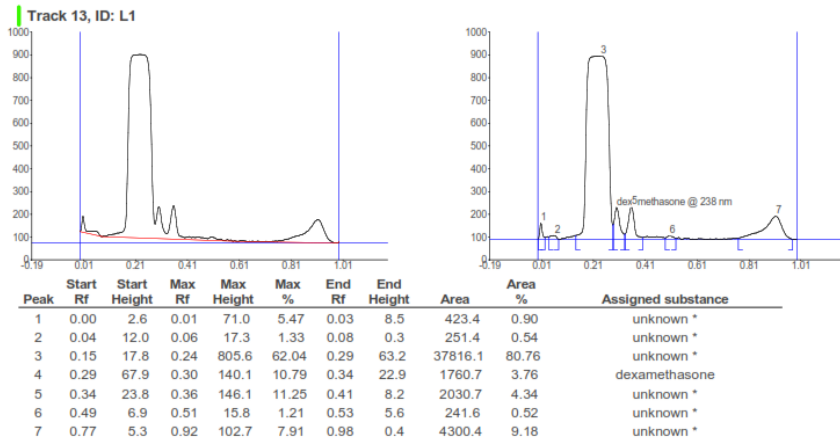
- Sampel J replikasi 3

Track 12, ID: J3

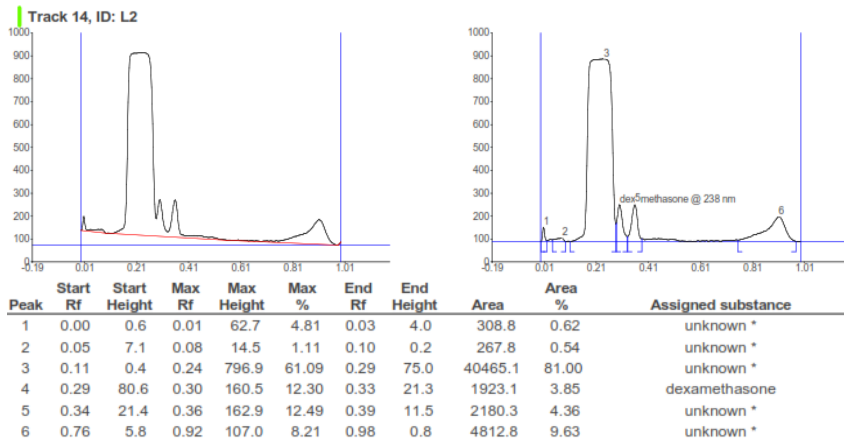


Peak	Start Rf	Start Height	Max Rf	Max Height	Max %	End Rf	End Height	Area	Area %	Assigned substance
1	0.00	20.2	0.03	126.8	7.74	0.08	3.0	2985.6	6.50	unknown *
2	0.13	3.6	0.15	17.0	1.04	0.17	0.2	174.5	0.38	unknown *
3	0.17	1.2	0.22	478.7	29.24	0.26	72.3	10301.8	22.41	unknown *
4	0.26	72.4	0.28	274.9	16.79	0.31	52.2	3800.5	8.27	dexamethasone
5	0.31	52.3	0.37	90.5	5.53	0.39	51.4	2519.7	5.48	unknown *
6	0.39	51.5	0.42	93.2	5.69	0.45	50.1	1767.8	3.85	unknown *
7	0.45	51.7	0.48	179.4	10.96	0.51	57.8	3483.4	7.58	unknown *
8	0.52	59.0	0.56	162.7	9.94	0.67	34.0	7824.5	17.02	unknown *
9	0.77	89.7	0.87	214.0	13.07	0.98	0.4	13106.3	28.51	unknown *

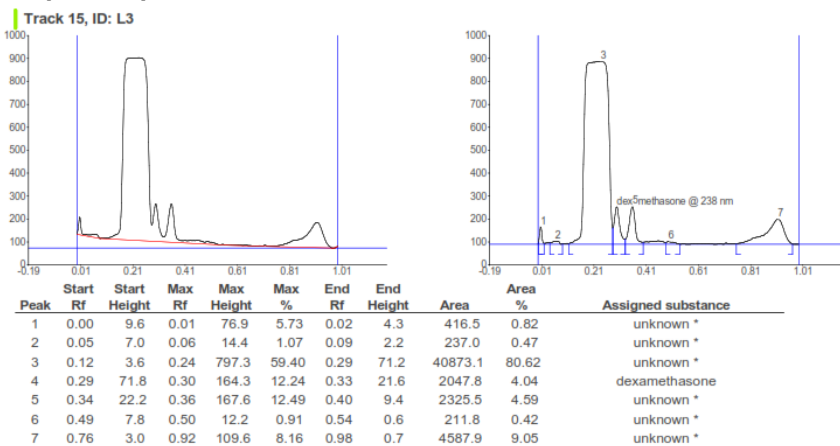
- Sampel L replikasi 1



- Sampel L replikasi 2



- Sampel L replikasi 3



CURRICULUM VITAE

A. Data pribadi

1. Nama : Nur Ilmi Ilham
2. Tempat, tgl. Lahir : Passeno Sidrap, 16 Maret 2002
3. Alamat : Jalan Politeknik, No. 15 Makassar
4. Kewarganegaraan : Warga Negara Indonesia

B. Riwayat Pendidikan

1. Tamat SD tahun 2014 di SDN 7 Baranti
2. Tamat SMP tahun 2017 di MTsN 1 Sidenreng Rappang
3. Tamat SMA tahun 2020 di MAN Sidenreng Rappang