DAFTAR PUSTAKA

Abbas, A. K., Lichtman, A. H., & Pillai, S. (2016a). *BASIC IMMUNOLOGY Functions and Disorders of the Immune System FIFTH EDITION*. https://doi.org/10.1016/B978-0-323-39082-8.01001-2

Akkarach Bumrungpert, Kalpravidh, R. W., Chuang, C.-C., Overman, A., Martinez, K., Kennedy, A., & McIntosh, M. (2010). Xanthones from Mangosteen Inhibit Inflammation in Human Macrophages and in Human Adipocytes Exposed to Macrophage-Conditioned Media. *The Journal of Nutrition Nutritional Immunology*, 842–847. https://doi.org/10.3945/jn.109.120022.expression

Al-Reza, S. M., Yoon, J. I., Kim, H. J., Kim, J. S., & Kang, S. C. (2010). Anti-inflammatory activity of seed essential oil from Zizyphus jujuba. *Food and Chemical Toxicology*, *48*(2), 639–643. https://doi.org/10.1016/j.fct.2009.11.045

Arawwawala, M., Thabrew, I., Arambewela, L., & Handunnetti, S. (2010). Anti-inflammatory activity of Trichosanthes cucumerina Linn. in rats. *Journal of Ethnopharmacology*, *131*(3), 538–543. https://doi.org/10.1016/j.jep.2010.07.028

Bradley, J. (2008). TNF-mediated inflammatory disease. *Journal of Pathology*, *214*, 231–241. https://doi.org/10.1002/path

Brenner, D., Blaser, H., & Mak, T. W. (2015). Regulation of tumour necrosis factor signalling: Live or let die. *Nature Reviews Immunology*, *15*(6), 362–374. https://doi.org/10.1038/nri3834

Bumrungpert, A., Kalpravidh, R. W., Chuang, C. C., Overman, A., Martinez, K., Kennedy, A., & McIntosh, M. (2010). Xanthones from mangosteen inhibit inflammation in human macrophages and in human adipocytes exposed to macrophage-conditioned media. *Journal of Nutrition*, *140*(4), 842–847. https://doi.org/10.3945/jn.109.120022

Caplan A, & Fett N, & Werth V (2019). Glucocorticoids. Kang S, & Amagai M, & Bruckner A.L., & Enk A.H., & Margolis D.J., & McMichael A.J., & Orringer J.S.(Eds.), *Fitzpatrick's Dermatology, 9e*. McGraw Hill.

Chang, S. N., Khan, I., Dey, D. K., Cho, K. H., Hwang, B. S., Bae, K. B., Kang, S. C., & Park, J. G. (2019a). Decursinol angelate ameliorates 12-O-tetradecanoyl phorbol-13-acetate (TPA) -induced NF-κB activation on mice ears by inhibiting exaggerated inflammatory cell infiltration, oxidative stress and pro-inflammatory cytokine production. *Food and Chemical Toxicology*, *132*(July), 110699. https://doi.org/10.1016/j.fct.2019.110699

Chen, L. G., Yang, L. L., & Wang, C. C. (2008). Anti-inflammatory activity of mangostins from Garcinia mangostana. *Food and Chemical Toxicology*, *46*(2), 688–693. https://doi.org/10.1016/j.fct.2007.09.096

Chien, S. T., Shi, M. der, Lee, Y. C., Te, C. C., & Shih, Y. W. (2015). Galangin, a novel dietary flavonoid, attenuates metastatic feature via PKC/ERK signaling pathway in TPA-treated liver cancer HepG2 cells. *Cancer Cell International*, *15*(1). https://doi.org/10.1186/s12935-015-0168-2

Cho, B. O., Ryu, H. W., So, Y., Lee, C. W., Jin, C. H., Yook, H. S., Jeong, Y. W., Park, J. C., & Jeong, I. Y. (2014a). Anti-Inflammatory effect of mangostenone F in lipopolysaccharide-stimulated RAW264.7 macrophages by suppressing NF-κB and MAPK activation. *Biomolecules and Therapeutics*, *22*(4), 288–294. https://doi.org/10.4062/biomolther.2014.052

Chun, K. S., Keum, Y. S., Han, S. S., Song, Y. S., Kim, S. H., & Surh, Y. J. (2003). Curcumin inhibits phorbol ester-induced expression of cyclooxygenase-2 in mouse skin through suppression of extracellular signal-regulated kinase activity and NF-κB activation. *Carcinogenesis*, *24*(9), 1515–1524. https://doi.org/10.1093/carcin/bgg107

Dainichi, T., Hanakawa, S., & Kabashima, K. (2014). Classification of inflammatory skin diseases: A proposal based on the disorders of the three-layered defense systems, barrier, innate immunity and acquired immunity. *Journal of Dermatological Science*, *76*(2), 81–89. https://doi.org/10.1016/j.jdermsci.2014.08.010

Darlenski, R., Kazandjieva, J., & Tsankov, N. (2011). Skin barrier function: morphological basis and regulatory mechanisms. In *Journal of Clinical Medicine* (Vol. 4, Issue 1, pp. 36–45).

Gutierrez-Orozco, F., & Failla, M. L. (2013). Biological activities and bioavailability of mangosteen xanthones: A critical review of the current evidence. *Nutrients*, *5*(8), 3163–3183. https://doi.org/10.3390/nu5083163

Ho, A. W., & Kupper, T. S. (2019). T cells and the skin: from protective immunity to inflammatory skin disorders. *Nature Reviews Immunology*, *19*(8), 490–502. https://doi.org/10.1038/s41577-019-0162-3

Huang, H., Cao, K., Malik, S., Zhang, Q., Li, D., Chang, R., Wang, H., Lin, W., Van Doren, J., Zhang, K., Du, Z., & Zheng, X. (2015). Combination of 12-O-tetradecanoylphorbol-13-Acetate with diethyldithiocarbamate markedly inhibits pancreatic cancer cell growth in 3D culture and in immunodeficient mice. *International Journal of Molecular Medicine*, *35*(6), 1617–1624. https://doi.org/10.3892/ijmm.2015.2163

Ibrahim, M. Y., Hashim, N. M., Mariod, A. A., Mohan, S., Abdulla, M. A., Abdelwahab, S. I., & Arbab, I. A. (2016). α-Mangostin from Garcinia mangostana Linn: An updated review of its pharmacological properties. *Arabian Journal of Chemistry*, *9*(3), 317–329. https://doi.org/10.1016/j.arabjc.2014.02.011

Jalian, H. R., & Kim, J. (2009). Immunology of the Skin. In *Cosmetic Dermatology* (Vol. 2, pp. 22–28). The McGraw-Hill Companies, Inc. https://doi.org/10.1001/jama.1926.02670370006003

Kalyan Kumar, G., Dhamotharan, R., Kulkarni, N. M., Mahat, M. Y. A., Gunasekaran, J., & Ashfaque, M. (2011). Embelin reduces cutaneous TNF-α level and ameliorates skin edema in acute and chronic model of skin inflammation in mice. *European Journal of Pharmacology*, *662*(1–3), 63–69. https://doi.org/10.1016/j.ejphar.2011.04.037

Khan, A. Q., Khan, R., Qamar, W., Lateef, A., Ali, F., Tahir, M., Muneeb-U-Rehman, & Sultana, S. (2012). Caffeic acid attenuates 12-O-tetradecanoyl-phorbol-13-acetate (TPA)-induced NF-κB and COX-2 expression in mouse skin: Abrogation of oxidative stress, inflammatory responses and proinflammatory cytokine production. *Food and Chemical Toxicology*, *50*(2), 175–183. https://doi.org/10.1016/j.fct.2011.10.043

Khan, A. Q., Khan, R., Rehman, M. U., Lateef, A., Tahir, M., Ali, F., & Sultana, S. (2012). Soy isoflavones (daidzein & genistein) inhibit 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced cutaneous inflammation via modulation of COX-2 and NF-κB in Swiss albino mice. *Toxicology*, *302*(2–3), 266–274. https://doi.org/10.1016/j.tox.2012.08.008

Komalasari, D. N. (2020). *Efek Anti Inflamasi Krim Ekstrak Kulit Manggis (Garcinia Mangostana) Pada Mencit Albino Yang Diinduksi 12-O-Tetradecanoylphorbol-13-Acetat (Tpa) (Analisa Kadar Tnf-A)*. Hasanuddin.

Lee, S. H., Kim, D. W., Eom, S. A., Jun, S. Y., Park, M., Kim, D. S., Kwon, H. J., Kwon, H. Y., Han, K. H., Park, J., Hwang, H. S., Eum, W. S., & Choi, S. Y. (2012). Suppression of 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced skin inflammation in mice by transduced Tat-Annexin protein. *BMB Reports*, *45*(6), 354–359. https://doi.org/10.5483/BMBRep.2012.45.6.036

Liu, S. H., Lee, L. T., Hu, N. Y., Huange, K. K., Shih, Y. C., Munekazu, I., Li, J. M., Chou, T. Y., Wang, W. H., & Chen, T. S. (2012). Effects of alpha-mangostin on the expression of anti-inflammatory genes in U937 cells. *Chinese Medicine (United Kingdom)*, *7*, 1–11. https://doi.org/10.1186/1749-8546-7-19

Maru, G. B., Gandhi, K., Ramchandani, A., & Kumar, G. (2014). *The Role of Inflammation in Skin Cancer* (pp. 437–469). https://doi.org/10.1007/978-3-0348-0837-8_17

Marzaimi, I. N., & Aizat, W. M. (2019). Current Review on Mangosteen Usages in Antiinflammation and Other Related Disorders. In *Bioactive Food as Dietary Interventions for Arthritis and Related Inflammatory Diseases* (2nd ed.). Elsevier Inc. https://doi.org/10.1016/b978-0-12-813820-5.00017-9

Medeiros, R., Otuki, M. F., Avellar, M. C. W., & Calixto, J. B. (2007). Mechanisms underlying the inhibitory actions of the pentacyclic triterpene α-amyrin in the mouse skin inflammation induced by phorbol ester 12-O-tetradecanoylphorbol-13-acetate. *European Journal of Pharmacology*, *559*(2–3), 227–235. https://doi.org/10.1016/j.ejphar.2006.12.005

Miryanti, Y. A., Sapei, L., Budiono, K., & Indra, S. (2011). EKSTRAKSI ANTIOKSIDAN DARI KULIT BUAH MANGGIS (Garcinia mangostana L.). *Research Report - Engineering Science*, *2*. https://doi.org/Bandung: Universitas Katolik Parahyangan

Mohan, S., Syam, S., Abdelwahab, S. I., & Thangavel, N. (2018a). An anti-inflammatory molecular mechanism of action of α-mangostin, the major xanthone from the pericarp of Garcinia mangostana: an in silico, in vitro and in vivo approach. In *Food and Function* (Vol. 9, Issue 7). https://doi.org/10.1039/c8fo00439k

Mokoagow, K. P. (2020). *Efek Anti Inflamasi Krim Ekstrak Kulit Garciana Mangostana pada Mecit Albino yang Diinduksi dengan 12-0-Tetradecanoylphorbol-13-Acetat (Analisa Kadar Cox-2 dan Histopatologi)*. Hasanuddin.

Murakawa, M., Yamaoka, K., Tanaka, Y., & Fukuda, Y. (2006). Involvement of tumor necrosis factor (TNF)-α in phorbol ester 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced skin edema in mice. *Biochemical Pharmacology*, *71*(9), 1331–1336. https://doi.org/10.1016/j.bcp.2006.01.005

Obolskiy, D., Pischel, I., Siriwatanametanon, N., & Heinrich, M. (2009). Garcinia mangostana L.: A Phytochemical and Pharmacological Review. *Phytotherapy Research*, *23*(4), 1047–1065. https://doi.org/10.1002/ptr

Ovalle-Magallanes, B., Eugenio-Pérez, D., & Pedraza-Chaverri, J. (2017). Medicinal properties of mangosteen (Garcinia mangostana L.): A comprehensive update. In *Food and Chemical Toxicology* (Vol. 109, pp. 102–122). Elsevier Ltd. https://doi.org/10.1016/j.fct.2017.08.021

Pasparakis, M., Haase, I., & Nestle, F. O. (2014). Mechanisms regulating skin immunity and inflammation.pdf. *Nature Reviews: Immunology*, *14*, 289–301.

Passos, G. F., Medeiros, R., Marcon, R., Nascimento, A. F. Z., Calixto, J. B., & Pianowski, L. F. (2013). The role of PKC/ERK1/2 signaling in the anti-inflammatory effect of tetracyclic triterpene euphol on TPA-induced skin inflammation in mice. *European Journal of Pharmacology*, *698*(1–3), 413–420. https://doi.org/10.1016/j.ejphar.2012.10.019

Pedraza-Chaverri, J., Cárdenas-Rodríguez, N., Orozco-Ibarra, M., & Pérez-Rojas, J. M. (2008a). Medicinal properties of mangosteen (Garcinia mangostana). *Food and Chemical Toxicology*, *46*(10), 3227–3239. https://doi.org/10.1016/j.fct.2008.07.024

Pothitirat, W., Chomnawang, M. T., Supabphol, R., & Gritsanapan, W. (2009). Comparison of bioactive compounds content, free radical scavenging and anti-acne inducing bacteria activities of extracts from the mangosteen fruit rind at two stages of maturity. *Fitoterapia*, *80*(7), 442–447. https://doi.org/10.1016/j.fitote.2009.06.005

Putri, W. S., Warditiani, N. K., & Larasanty, L. P. F. (2013). Skrining Fitokimia Ekstrak Etil Asetat Kulit Buah Manggis (Garcinia Mangostana L .). *Journal Pharmacon*, *09*(4), 56–59.

Radaszkiewicz, K. A., Beckerová, D., Woloszczuková, L., Radaszkiewicz, T. W., Lesáková, P., Blanářová, O. V., Kubala, L., Humpolíček, P., & Pachernik, J. (2020). 12-O-Tetradecanoylphorbol-13-acetate increases cardiomyogenesis through PKC/ERK signaling. *Scientific Reports*, *10*(1), 1–13. https://doi.org/10.1038/s41598-020-73074-4

Ryu, B. M., Qian, Z. J., & Kim, S. K. (2010). Purification of a peptide from seahorse, that inhibits TPA-induced MMP, iNOS and COX-2 expression through MAPK and NF-κB activation, and induces human osteoblastic and chondrocytic differentiation. *Chemico-Biological Interactions*, *184*(3), 413–422. https://doi.org/10.1016/j.cbi.2009.12.003

Sato, Y., & Ohshima, T. (2000). The expression of mRNA of proinflammatory cytokines during skin wound healing in mice: A preliminary study for forensic wound age estimation (II). *International Journal of Legal Medicine*, *113*(3), 140–145. https://doi.org/10.1007/s004140050285

Shan, T., Ma, Q., Guo, K., Liu, J., Li, W., Wang, F., & Wu, E. (2011). Xanthones from Mangosteen Extracts as Natural Chemopreventive Agents: Potential Anticancer Drugs. *Current Molecular Medicine*, *11*(8), 666–677. https://doi.org/10.2174/156652411797536679

Tatiya-aphiradee, N., Chatuphonprasert, W., & Jarukamjorn, K. (2019). Anti-inflammatory effect of Garcinia mangostana Linn. pericarp extract in methicillin-resistant Staphylococcus aureus-induced superficial skin infection in mice. *Biomedicine and Pharmacotherapy*, *111*(September 2018), 705–713. https://doi.org/10.1016/j.biopha.2018.12.142

Tewtrakul, S., Wattanapiromsakul, C., & Mahabusarakam, W. (2009). Effects of compounds from Garcinia mangostana on inflammatory mediators in RAW264.7 macrophage cells. *Journal of Ethnopharmacology*, *121*(3), 379–382. https://doi.org/10.1016/j.jep.2008.11.007

Turner, M. D., Nedjai, B., Hurst, T., & Pennington, D. J. (2014). Cytokines and chemokines: At the crossroads of cell signalling and inflammatory disease. *Biochimica et Biophysica Acta - Molecular Cell Research*, *1843*(11), 2563–2582. https://doi.org/10.1016/j.bbamcr.2014.05.014

Wang, F., Ma, H., Liu, Z., Huang, W., Xu, X., & Zhang, X. (2017). α-Mangostin inhibits DMBA/TPA-induced skin cancer through inhibiting inflammation and promoting autophagy and apoptosis by regulating PI3K/Akt/mTOR signaling pathway in mice. *Biomedicine and Pharmacotherapy*, *92*, 672–680. https://doi.org/10.1016/j.biopha.2017.05.129

Wang, K. S., Li, J., Wang, Z., Mi, C., Ma, J., Piao, L. X., Xu, G. H., Li, X., & Jin, X. (2016). Artemisinin inhibits inflammatory response via regulating NF-κB and MAPK signaling pathways. *Immunopharmacology and Immunotoxicology*.

Widowati, W., Darsono, L., Suherman, J., Fauziah, N., Maesaroh, M., & Erawijantari, P. putu. (2016a). Anti-inflammatory effect of mangosteen (Garcinia mangostana l.) peel extract and its compounds in lps-induced raw264.7 cells. *Natural Product Sciences*, *22*(3), 147–153. https://doi.org/10.20307/nps.2016.22.3.147

Wu, J. Y., Chen, Y. J., Bai, L., Liu, Y. X., Fu, X. Q., Zhu, P. L., Li, J. K., Chou, J. Y., Yin, C. Le, Wang, Y. P., Bai, J. X., Wu, Y., Wu, Z. Z., & Yu, Z. L. (2020). Chrysoeriol ameliorates TPA-induced acute skin inflammation in mice and inhibits NF-κB and STAT3 pathways. *Phytomedicine*, *68*(September 2019). https://doi.org/10.1016/j.phymed.2020.153173

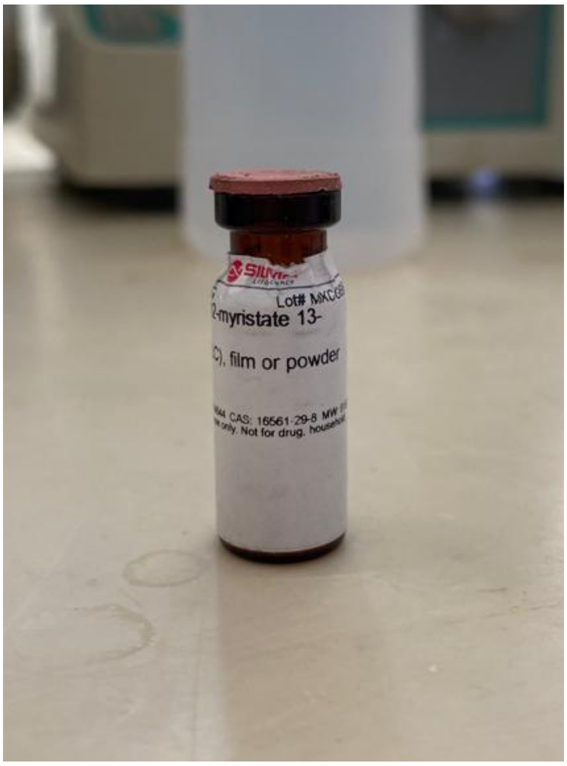
Zelová, H., & Hošek, J. (2013). TNF-α signalling and inflammation: Interactions between old acquaintances. *Inflammation Research*, *62*(7), 641–651. https://doi.org/10.1007/s00011-013-0633-0

Zhang, M., Zhou, J., Wang, L., Li, B., Guo, J., Guan, X., Han, Q., & Zhang, H. (2014). Caffeic acid reduces cutaneous tumor necrosis factor alpha (TNF-α), IL-6and IL-1 βlevels and ameliorates skin edema in acute and chronic model of cutaneous inflammation in mice. *Biological and Pharmaceutical Bulletin*, *37*(3), 347–354. https://doi.org/10.1248/bpb.b13-00459

Zhu, G., Chen, Y., Zhang, X., Wu, Q., Zhao, Y., Chen, Y., Sun, F., Qiao, Y., & Wang, J. (2017). 12-O-Tetradecanoylphorbol-13-acetate (TPA) is anti-tumorigenic in liver cancer cells via inhibiting YAP through AMOT. *Scientific Reports*, *7*(February), 1–11. https://doi.org/10.1038/srep44940

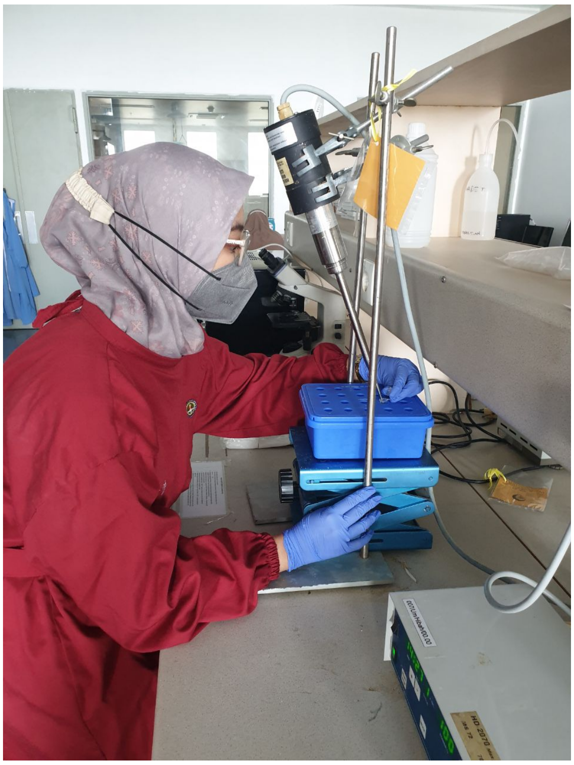
LAMPIRAN

1. TPA

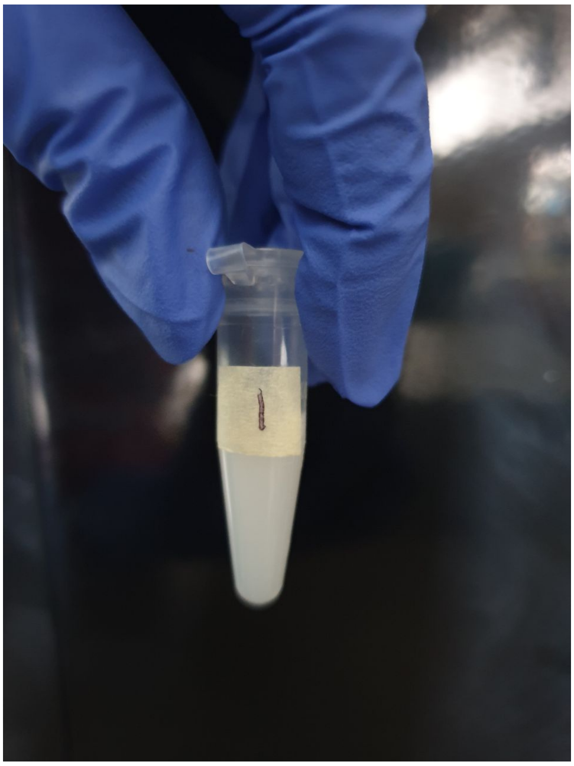


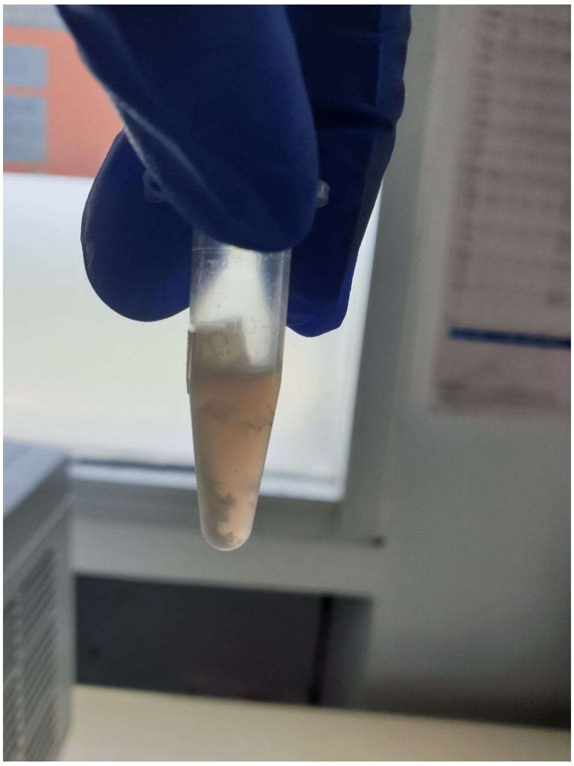
2. Kit ELISA TNF-α

3. **Sonicator dan Pencacahan**



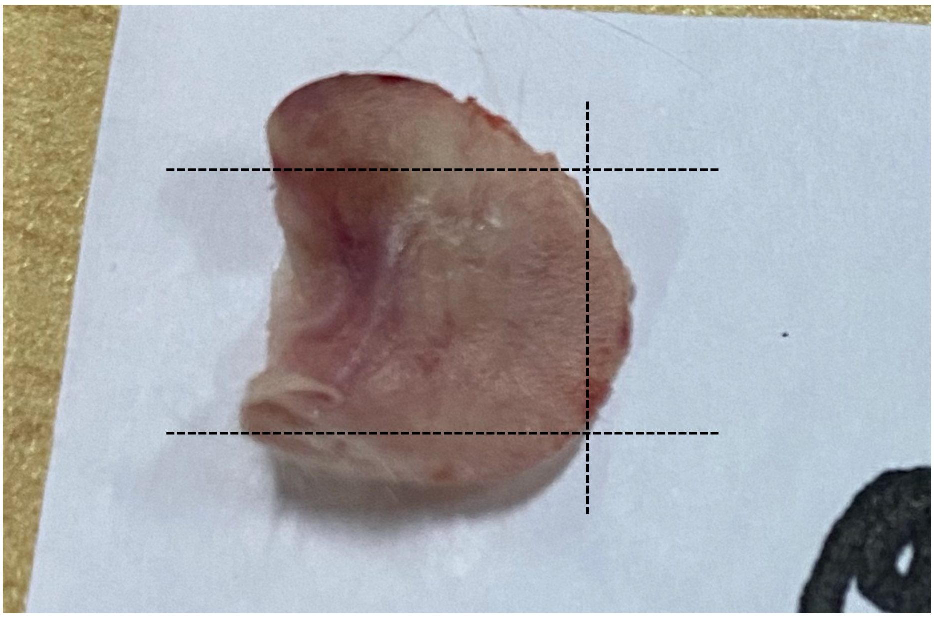
4. **Jaringan tercacah dan Supernatant**



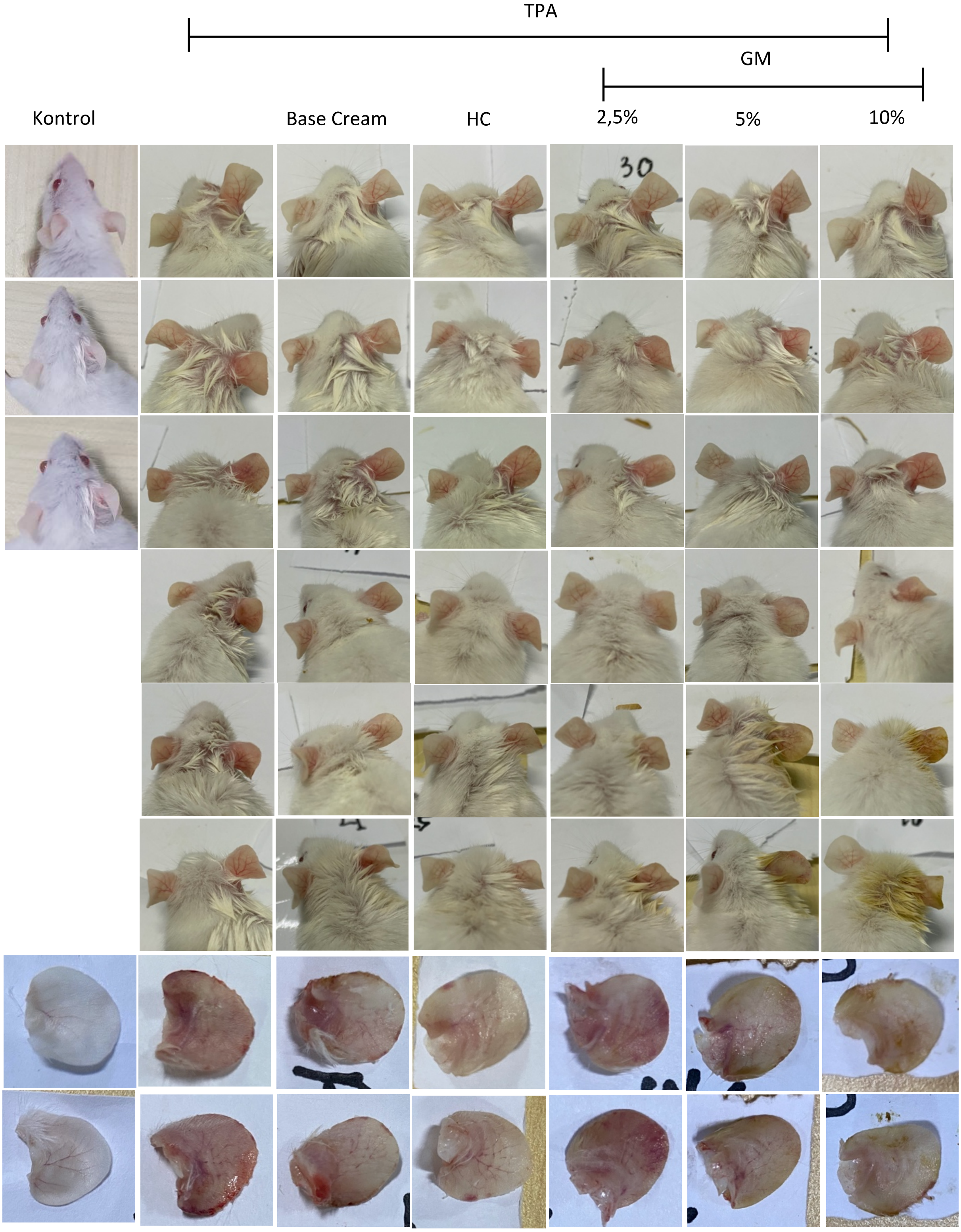


5. **Krim Ekstrak Kulit GM**

6. **Pembuatan Model Jaringan Biopsi**



7. Sampel Penelitian



8. Hasil Analisi deskriptif Kadar TNF-α jaringan pada berbagai kelompok

Report

TNF-alfa

Kelompok	N	Minimum	Maximum	Mean	Std. Deviation
Tanpa perlakuan	5	6.26	88.27	36.9660	30.60362
TPA	5	49.82	67.05	55.2440	7.01768
Hidrokortison	5	13.00	28.50	22.7600	6.22452
Base cream	5	39.59	108.14	63.3540	26.32130
GM 2.5%	5	36.70	71.82	50.4200	13.66650
GM 5%	5	13.91	61.79	37.6340	20.68783
GM 10%	5	12.41	50.06	26.1640	14.57128
Total	35	6.26	108.14	41.7917	22.37029

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
TNF-alfa	Tanpa perlakuan	.347	5	.049	.847	5	.185
	TPA	.299	5	.164	.819	5	.115
	Hidrokortison	.211	5	.200*	.904	5	.433
	Base cream	.335	5	.070	.833	5	.145
	GM 2.5%	.213	5	.200*	.931	5	.600
	GM 5%	.213	5	.200*	.923	5	.548
	GM 10%	.249	5	.200*	.894	5	.376

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

9. Hasil Uji One Way Anova

Test of Homogeneity of Variances

TNF-alfa

Levene Statistic	df1	df2	Sig.
1.544	6	28	.201

ANOVA

TNF-alfa

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6836.746	6	1139.458	3.135	.018
Within Groups	10177.866	28	363.495		
Total	17014.612	34			

10. Hasil Uji LSD berbagai kelompok

Multiple Comparisons

Dependent Variable: TNF-alfa

LSD

					95% Confidence Interval	
(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Tanpa perlakuan	TPA	-18.2780	12.05811	.141	-42.9779	6.4219
	Hidrokortison	14.2060	12.05811	.249	-10.4939	38.9059
	Base cream	-26.3880*	12.05811	.037	-51.0879	-1.6881
	GM 2.5%	-13.4540	12.05811	.274	-38.1539	11.2459
	GM 5%	-.6680	12.05811	.956	-25.3679	24.0319
	GM 10%	10.8020	12.05811	.378	-13.8979	35.5019
TPA	Tanpa perlakuan	18.2780	12.05811	.141	-6.4219	42.9779
	Hidrokortison	32.4840*	12.05811	.012	7.7841	57.1839
	Base cream	-8.1100	12.05811	.507	-32.8099	16.5899
	GM 2.5%	4.8240	12.05811	.692	-19.8759	29.5239
	GM 5%	17.6100	12.05811	.155	-7.0899	42.3099
	GM 10%	29.0800*	12.05811	.023	4.3801	53.7799
Hidrokortison	Tanpa perlakuan	-14.2060	12.05811	.249	-38.9059	10.4939
	TPA	-32.4840*	12.05811	.012	-57.1839	-7.7841
	Base cream	-40.5940*	12.05811	.002	-65.2939	-15.8941
	GM 2.5%	-27.6600*	12.05811	.030	-52.3599	-2.9601
	GM 5%	-14.8740	12.05811	.228	-39.5739	9.8259
	GM 10%	-3.4040	12.05811	.780	-28.1039	21.2959
Base cream	Tanpa perlakuan	26.3880*	12.05811	.037	1.6881	51.0879

	TPA	8.1100	12.05811	.507	-16.5899	32.8099
	Hidrokortison	40.5940*	12.05811	.002	15.8941	65.2939
	GM 2.5%	12.9340	12.05811	.293	-11.7659	37.6339
	GM 5%	25.7200*	12.05811	.042	1.0201	50.4199
	GM 10%	37.1900*	12.05811	.005	12.4901	61.8899
GM 2.5%	Tanpa perlakuan	13.4540	12.05811	.274	-11.2459	38.1539
	TPA	-4.8240	12.05811	.692	-29.5239	19.8759
	Hidrokortison	27.6600*	12.05811	.030	2.9601	52.3599
	Base cream	-12.9340	12.05811	.293	-37.6339	11.7659
	GM 5%	12.7860	12.05811	.298	-11.9139	37.4859
	GM 10%	24.2560	12.05811	.054	-.4439	48.9559
GM 5%	Tanpa perlakuan	.6680	12.05811	.956	-24.0319	25.3679
	TPA	-17.6100	12.05811	.155	-42.3099	7.0899
	Hidrokortison	14.8740	12.05811	.228	-9.8259	39.5739
	Base cream	-25.7200*	12.05811	.042	-50.4199	-1.0201
	GM 2.5%	-12.7860	12.05811	.298	-37.4859	11.9139
	GM 10%	11.4700	12.05811	.350	-13.2299	36.1699
GM 10%	Tanpa perlakuan	-10.8020	12.05811	.378	-35.5019	13.8979
	TPA	-29.0800*	12.05811	.023	-53.7799	-4.3801
	Hidrokortison	3.4040	12.05811	.780	-21.2959	28.1039
	Base cream	-37.1900*	12.05811	.005	-61.8899	-12.4901
	GM 2.5%	-24.2560	12.05811	.054	-48.9559	.4439
	GM 5%	-11.4700	12.05811	.350	-36.1699	13.2299

Based on observed means.

The error term is Mean Square(Error) = 363.495.

*. The mean difference is significant at the .05 level.