

DAFTAR PUSTAKA

- Anjana, V., Patel, S., Patel, A., Vyas, A., Patel, N. 2016. Sample Preparation In Bioanalysis: A Review. *IJOST* 5, 6-10.
- Armenta, S., Garrigues, S., de la Guardia, M. Green Analytical chemistry. *TrAC Trends Anal. Chem.* 2008, 27, 497-511.
- Aswad, M., Hardianti, B., Subehan., Rifai, Y., Prayitno, S., Sukmana, D.D., Chiba, J., Hatanaka, Y., Hayakawa, Y., Tomohiro, T., 2020 'A potent inhibitor of NF-kB activation in breast cancer cells derived by direct thionation of piper nigrum L. crude extract', *Phytomedicine* (Under Review).
- Aziz, D.M., Hama, J.R., Alam, S.M., 2015. Synthesising a novel derivatives of piperine from black pepper (*Piper nigrum* L.). *J. Food Meas. Charact.* 9, 324–331.
- Bai, Y.F., Xu, H., 2000. Protective action of piperine against experimental gastric ulcer. *Acta Pharmacol. Sin.* 21, 357–359.
- Barrow GM. 1996. *Physical Chemistry* 6th Ed. New York: McGraw-Hill (ISE).
- Bezerra, D.P., Castro, F.O. de, Ana Paula N. N. Alves, Pessoa, C., Odorico, M., Moraes, D., Silveira, E.R., Lima, M.A.S., Elmiro, F.J.M., N., N.M. de A., Mesquita, R.O., Lima¹, M.W., Costa-Lotufo, and L. V., 2007. In vitro and in vivo antitumor effect of 5-FU combined with piperine and piperazine. *J. Appl. Toxicol.* 31, 156–163.
- Burnouf, T. 2007. Modern Plasma Fractionation. *Transfus. Med. Rev.* 21, 101–117.
- Chang R. 1977. *Physical chemistry with applications to biological systems*, New York: Macmillan Publishing.
- Dean, M., Barbara, M. 2013. *Column Chromatography*. London: IntechOpen.
- Do, M.T., Kim, H.G., Choi, J.H., Khanal, T., Park, B.H., Tran, T.P., Jeong, T.C., Jeong, H.G., 2013. Antitumor efficacy of Piperine in the treatment of human HER2-overexpressing breast cancer cells. *Food Chem.* 141, 2591–2599.
- European Medicines Agency, 1995. *Validation of Analytical Procedures: Text and Methodology*. *Prescrire Int.* 20, 278.
- Evans, G., 2004. *A Handbook Of Bioanalysis And Drug Metabolism*. CRC



Press, New York.

- Evelyn, C.P., 2009. *Anatomi dan Fisiologi untuk Paramedis*. Jakarta: Gramedia.
- Indrayanto, G., dan Yuwono, M., 2005. *Validation of Chromatographic Methodes of Analysis. Profiles of Drugs Substances, Excipients and Related Methodology*, Volume 32.
- Gandjar, I.G., Rohman, A. 2007. *Kimia Farmasi Analisis*. Yogyakarta: Pustaka Pelajar.
- Gorgani, L., Mohammadi, M., Najafpour, G.D., Nikzad, M., 2017. Piperine— The Bioactive Compound of Black Pepper: From Isolation to Medicinal Formulations. *Compr. Rev. Food Sci. Food Saf.* 16, 124–140.
- Gritter, R.J., Bobbit, J.M dan Schwarting, A.E., 1991. *Pengantar Kromatografi* ITB. Bandung.
- Harmita. 2004. *Petunjuk Pelaksanaan Validasi Metode Analisis dan Cara Perhitungannya*. *Majalah Ilmu Kefarmasian*, Vol. I, No.3, Desember.
- Hennion, Marie-Claire. 1999. Solid-phase extraction: method development, sorbents, and coupling with liquid chromatography. *Journal of Chromatography A*. 856 (1–2): 3–54.
- ICH, 2019. M10: Bioanalytical Method Validation 41, 2016–2018.
- Johnson, E.L dan Stevenson R., 1991. *Dasar Kromatografi Cair*. ITB Bandung, Bandung.
- Lin, Y., Xu, J., Liao, H., Li, L., Pan, L., 2014. Piperine induces apoptosis of lung cancer A549 cells via p53-dependent mitochondrial signaling pathway. *Tumor Biol.* 35, 3305–3310.
- Meyer, Veronika RF. 2010. *Practical High Performance Liquid Chromatography*. Switzerland: A John Wiley & SONS.
- Miller, J.N. & Miller, J.C., 2010. *Statistics and Chemometrics for Analytical Chemistry* Sixth Edit., Harlow, England: Pearson Education Limited
- Nugraha, Gilang. 2015. *Panduan Pemeriksaan Laboratorium Hematologi Dasar*. Jakarta: CV Trans Info Medika
- Permana, A.D., Tekko, I.A., McCarthy, H.O., Donnelly, R.F., 2019. New HPLC– MS method for rapid and simultaneous quantification of doxycycline, diethylcarbamazine and albendazole metabolites in rat plasma and organs after concomitant oral administration. *J. Pharm. Biomed. Anal.* 170, 243–

253.

- Rahman, A. 2009. Kromatografi untuk Analisis Obat. Yogyakarta: Graha Ilmu.
- Sabina, E.P., Souriyana, A.D.H., Jackline, D., Rasool, M.K., 2010. Piperine, an active ingredient of black pepper attenuates acetaminophen-induced hepatotoxicity in mice. *Asian Pac. J. Trop. Med.* 3, 971–976.
- Sadikin M. 2014. Biokimia Darah. Jakarta: Widya Medika.
- Settle, F. 1997. Handbook Of Instrumental Techniques For Analytical Chemistry. New Jersey : Prentice-Hall Inc.
- Shah, V.P., Midha, K.K., Dighe, S., McGilveray, I.J., Skelly, J.P., Yacobi, A., Layloff, T., Viswanathan, C.T., Cook, C.E., McDowall, R.D., Pittman, K.A., Spector, S., 1992. Analytical methods validation: Bioavailability, bioequivalence and pharmacokinetic studies: Sponsored by the American Association of Pharmaceutical Chemists, U.S. Food and Drug Administration. *Pharm. Res.* 9, 588–592.
- Snyder, L.R., Kirkland, J.J. & Dolan, J.W., 2010. Introduction to Modern Liquid Chromatography, Third Edition, Third Edit., Hoboken, New Jersey : John Wiley & Sons, Inc.
- Susanti, M., Dachriyanus. 2014. Kromatografi Cair Kinerja tinggi. Padang: Andalas University Press.
- Swarbrick, J. and James C. Boylan. 1998. Encyclopedia Of Pharmaceutical Technology. Volume 1. New York: Marcel Dekker, Inc. New York
- The United States Pharmacopeial Convention, 2006. USP chapter 621 Chromatography, First Supplement to USP 40–NF 35 1–12.
- Umadevi, P., Deepti, K., Venugopal, D.V.R., 2013. Synthesis, anticancer and antibacterial activities of piperine analogs. *Med. Chem. Res.* 22, 5466–5471.
- Weston, A. & Phyllis, R.B., 1997. HPLC and CE Principles and practice. San Diego (Calif.) : Academic Press.
- Wongpa, S., Himakoun, L., Soontornchai, S., Temcharoen, P., 2007. Antimutagenic effects of piperine on cyclophosphamide-induced chromosome aberrations in rat bone marrow cells. *Asian Pacific J. Cancer Prev.* 8, 623–627.
- Yuwono, Mochammad & Indrayanto, Gunawan. 2005. Validation Of Chromatographic Methods Of Analysis. Airlangga University. *Prev.* 3, 223-259.

Lampiran 7. Rekomendasi Persetujuan Etik

	<p>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. Agusssalim Bukhari, MMed, PhD, SpGK. Telp. 081241850858; 0411 5780103; Fax : 0411-581431</p>	
---	---	---

REKOMENDASI PERSETUJUAN ETIK

Nomor : 305/UN4.6.4.5.31/ PP36/ 2021

Tanggal: 30 April 2021

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

No Protokol	UH21040234	No Sponsor Protokol	
Peneliti Utama	Aisyah Andiani	Sponsor	
Judul Peneliti	Validasi Metode Analisis Kadar Senyawa Tiopiperin dalam Plasma Tikus Menggunakan HPLC		
No Versi Protokol	1	Tanggal Versi	14 April 2021
No Versi PSP		Tanggal Versi	
Tempat Penelitian	Fakultas Farmasi Universitas Hasanuddin Makassar		
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku 30 April 2021 sampai 30 April 2022	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian Kesehatan FKUH	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan	
Sekretaris Komisi Etik Penelitian Kesehatan FKUH	Nama dr. Agusssalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)	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 Laporan 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