

## DAFTAR PUSTAKA

- Agilent Technologies, Inc., 2022, *Check the signal-to-noise ratio*, diakses dari <https://openlab.help.agilent.com/en/index.htm#t=mergedProjects%2FDataAnalysis%2FSystemSuitabilityCalculations.htm> pada 23 Mei 2024.
- Agilent Technologies, Inc., 2022, *Signal-to-noise calculation*, diakses dari <https://openlab.help.agilent.com/en/index.htm#t=mergedProjects%2FDataAnalysis%2FSystemSuitabilityCalculations.htm> pada 23 Mei 2024.
- Agilent Technologies, Inc., 2022, *System Suitability Calculations*, diakses dari <https://openlab.help.agilent.com/en/index.htm#t=mergedProjects%2FDataAnalysis%2FSystemSuitabilityCalculations.htm> pada 23 Mei 2024.
- American Chemical Society, 2001, *Getting the peaks perfect: System suitability for HPLC*, diakses dari <https://pubsapp.acs.org/subscribe/archive/tcaw/10/i09/html/09dong.html?#:~:text=Primary%20SST%20parameters%20are%20resolution,%2C%20precision%2C%20and%20column%20stability.> pada 23 Mei 2024.
- Amicon, 1989, *Dye-ligand chromatography, Theory of matrix gel media*, Amicon Division, *Applications method*, W.R. Grace & Co., Cherry Hill Drive.
- Barker, T., 2023, *Vitamins and Human Health: Systematic Reviews and Original Research*, *Nutrients*, 15(13): 2888.
- Centers for Disease Control and Prevention, 2022, *Vitamins & Minerals*, diakses dari <https://www.cdc.gov/nutrition/infantandtoddlernutrition/vitamins-minerals/> pada 11 Desember 2023.
- Centers for Disease Control and Prevention, 2022, *Micronutrient Facts*, diakses dari <https://www.cdc.gov/nutrition/micronutrient-malnutrition/micronutrients/index.html> pada 11 Desember 2023.
- Coskun, O., 2016, *Separation techniques: Chromatography*, *Northern Clinics Of Istanbul*, 3(2): 156-160.
- Cutler, P., 2004, *Dye-ligand affinity chromatography (Methods in molecular biology)*, Humana Press, Totowa.
- Das, M., & Dasgupta, D., 1998, *Pseudo-affinity column chromatography based rapid purification procedure for T7 RNA polymerase*, *Preparative Biochemistry & Biotechnology*, 28(4): 339-48.
- Day, Jr., R.A. & Underwood, A.L., 2001, *Analisis Kimia Kuantitatif*, Edisi Keenam, Penerbit Erlangga, Jakarta.
- Dhale, M., Singh, R., Sharma, R., & Arora, S., 2023, *Quantification of all B vitamins in a single run using ion-pair modified liquid chromatography with UV detection*, *Journal of Food Composition and Analysis*, 123: 105602.
- Direktorat Jenderal Perikanan Budidaya, 2021, *Peraturan Direktur Jenderal Perikanan Budidaya Nomor 285 Tahun 2021 tentang Pedoman Pengujian Mutu Obat Ikan*, Direktorat Jenderal Perikanan Budidaya, Jakarta.

- Direktorat Jenderal Peternakan, 2009, *Farmakope Obat Hewan Indonesia Jilid II (Farmasetik dan Premiks) Edisi 4*, Departemen Pertanian Republik Indonesia, Jakarta.
- Dong, M.W., Huynh-Ba, K., & Wong, A.W., 2020, Validation of Stability-Indicating HPLC Methods for Pharmaceuticals: Overview, Methodologies, and Case Studies, *LCGC North America*, 38(11): 606-618.
- Duncan, P.L., Lovell, R.T., Butterworth Jr., C.E., Freeberg, L.E., & Tamura, T., 1993, Dietary folate requirement determined for channel catfish, *Ictalurus punctatus*, *The Journal of Nutrition*, 123(11): 1888-1897.
- Firer, M.A., 2001, Efficient elution of functional proteins in affinity chromatography, *Journal of Biochemical and Biophysical Methods*, 49 (1-3): 433-42.
- Gandjar & Rohman, 2007, *Kimia Farmasi Analisis*, Pustaka Pelajar, Yogyakarta.
- Glinko, A., Bozym, M.J., Owens, M.L., Usher, K.M., & Majors, R.E., 2008, Reversed-Phase HPLC Separation of Water-Soluble Vitamins on Agilent ZORBAX Eclipse Plus Columns (Application Note Nomor 5989-9313EN), *Application note*, diakses dari <https://www.agilent.com/cs/library/applications/5989-9313EN.pdf> pada 17 Januari 2024.
- Greenberg, J.A., Bell, S.J., Guan, Y., & Yu, Y.H., 2011, Folic Acid Supplementation and Pregnancy: More Than Just Neural Tube Defect Prevention, *Reviews in Obstetrics and Gynecology*, 4(2): 52-59.
- Hamre, K., Sissener, N.H., Lock, E-J., Olsvik, P.A., Espe, M., Torstensen, B.E., Silva, J., Johansen, J., Waagbo, R., & Hemre, G-I., 2016, Antioxidant nutrition in Atlantic salmon (*Salmo salar*) parr and post-smolt, fed diets with high inclusion of plant ingredients and graded levels of micronutrients and selected amino acids, *PeerJ*, DOI 10.7717/peerj.2688.
- Hidayat, I.R., Zuhrotun, A., & Sopyan, I., 2021, Design-expert Software sebagai Alat Optimasi Formulasi Sediaan Farmasi, *Majalah Farmasetika*, 6(1): 99-120.
- International Council for Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use, 1995, *ICH Topic Q2 (R1) Validation of Analytical Procedures: Text and Methodology*, diakses dari [https://www.ema.europa.eu/en/documents/scientific-guideline/ich-guideline-q2r1-validation-analytical-procedures-text-and-methodology-step-5-first-version\\_en.pdf](https://www.ema.europa.eu/en/documents/scientific-guideline/ich-guideline-q2r1-validation-analytical-procedures-text-and-methodology-step-5-first-version_en.pdf) pada 8 Januari 2024.
- Jin, P., Xia, L., Li, Z., Che, N., Zou, D., & Hu., X., 2012, Rapid determination of thiamine, riboflavin, niacinamide, pantothenic acid, pyridoxine, folic acid and ascorbic acid in Vitamins with Minerals Tablets by high-performance liquid chromatography with diode array detector, *Journal of Pharmaceutical and Biomedical Analysis*, 70(15): 151-157.
- Kailasam, S., 2022, Ion Pair Chromatography – How IPC Works, Strengths, Limitations and Applications, *Technology Networks*, diakses dari <https://www.technologynetworks.com/analysis/articles/ion-pair-chromatography-how-ipc-works-strengths-limitations-and-applications-358440> pada 7 Januari 2024.

- Karlsson, E., Ryden, L., & Brewer, J., 1998, *Ion exchange chromatography (Protein purification: Principles, High Resolution Methods, and Applications 2<sup>nd</sup> Edition)*, Wiley, New York.
- Kementerian Kelautan dan Perikanan Republik Indonesia, 2014, *Refleksi 2012-2014 dan Outlook 2015-2019*, Kementerian Kelautan dan Perikanan Republik Indonesia, Serang.
- Kementerian Kelautan dan Perikanan Republik Indonesia, 2024, *Peraturan Menteri Kelautan dan Perikanan Republik Indonesia Nomor 19/PERMEN-KP/2024 tentang Obat Ikan*, Kementerian Kelautan dan Perikanan Republik Indonesia, Jakarta.
- Kementerian Kelautan dan Perikanan Republik Indonesia, 2023, *Sejarah Singkat BPKIL Serang*, diakses dari <https://kkp.go.id/djpb/bpkilserang/page/2742-sejarah-singkat> pada 6 Desember 2023.
- Kementerian Kelautan dan Perikanan Republik Indonesia, 2023, *Kedudukan, Tugas, dan Fungsi*, diakses dari <https://kkp.go.id/djpb/bpkilserang/page/2743-kedudukan-tugas-dan-fungsi> pada 6 Desember 2023.
- Kementerian Kesehatan Republik Indonesia, 2020, *Farmakope Indonesia Edisi VI*, Kementerian Kesehatan Republik Indonesia, Jakarta.
- Lykstad, J., & Sharma, S., 2024, *Biochemistry, Water Soluble Vitamins*, StatPearls Publishing.
- Mahn, A., & Asenjo, J.A., 2005, Prediction of protein retention in hydrophobic interaction chromatography, *Biotechnology Advances*, 23(5): 359-68.
- Merrell, B.J. & McMurry, J.P., 2023, *Folic Acid*, diakses dari [https://www.ncbi.nlm.nih.gov/books/NBK554487/#\\_article-21863\\_s2](https://www.ncbi.nlm.nih.gov/books/NBK554487/#_article-21863_s2) pada 11 Desember 2023.
- Meyer, C., Seiler, P., Bies, C., Cianciulli, C., Watzig, H., Meyer, V.R., 2012, Minimum required signal-to-noise ratio for optimal precision in HPLC and CE, *ELECTROPHORESIS*, 33(11): 1509-1516.
- National Cancer Institute, 2024, *biological*, diakses dari <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/biological> pada 1 April 2024.
- Porath, J., 1992, Immobilized metal ion affinity chromatography, *Protein Expression and Purification*, 3(4): 263-81.
- Pratiwi, F.S., 2023, *Potensi Perikanan Indonesia Capai 12,01 Juta Ton pada 2022*, diakses dari <https://dataindonesia.id/agribisnis-kehutanan/detail/potensi-perikanan-indonesia-capai-1201-juta-ton-pada-2022>, pada 7 Januari 2024.
- PubChem, 2024, *Folic Acid*, diakses <https://pubchem.ncbi.nlm.nih.gov/compound/folate> dari pada 13 Februari 2024.
- Queiroz, J.A., Tomaz, C.T., & Cabral, J.M., 2001, Hydrophobic interaction chromatography of proteins, *Journal of Biotechnology*, 87(2): 143-59.
- Ravisankar, P., Navya, C.N., Pravallika, D., & Sri, C.N., 2015, A Review on Step-by-Step Analytical Method Validation, *IOSR Journal Of Pharmacy*, 5(10): 7-19.

- Scaglione, F. & Panzavolta, G., 2014, Folate, folic acid and 5-methyltetrahydrofolate are not the same thing, *Xenobiotica*, 44(5): 480-8.
- Schmidt, M., Latif, A.A., Prager, A., Gläser, R., & Schulze, A., 2021, Highly Efficient One-Step Protein Immobilization on Polymer Membranes Supported by Response Surface Methodology, *Frontiers in Chemistry*, 9: 804698.
- Scopes, R.K., 1984, Use of differential dye-ligand chromatography with affinity elution for enzyme purification: 2-Keto-3-deoxy-6-phosphogluconate aldolase from *Zymomonas mobilis*, *Analytical Biochemistry*, 136(2): 525-9.
- Setiawan, A., 2023, *Menyiapkan Tata Kelola Laut Berkelanjutan*, diakses dari <https://indonesia.go.id/kategori/ragam-ais-forum-2023/7295/menyiapkan-tata-kelola-laut-berkelanjutan?lang=1> pada 7 Januari 2024.
- Sherman, J., Fried, B., & Dekker, M., 1991, *Handbook of Thin-Layer Chromatography*, Marcel Dekker Inc., New York.
- Shi, L., Feng, L., Jiang, W.D., Liu, Y., Jiang, J., Wu, P., Zhao, J., Kuang, S.Y., Tang, L., Tang, W.N., Zhang, Y.A., & Zhou, X.Q., 2015, Folic acid deficiency impairs the gill health status associated with the NF- $\kappa$ B, MLCK and Nrf2 signaling pathways in the gills of young grass carp (*Ctenopharyngodon idella*), *Fish & Shellfish Immunology*, 47(1): 289-301.
- Stahlberg, J., 2000., *CHROMATOGRAPHY: LIQUID | Ion Pair Liquid Chromatography*, Academic Press, Cambridge.
- Stat-Ease Inc., 2021, *Custom Designs*, Stat-Ease Inc., Minneapolis.
- Stat-Ease Inc., 2021, *Factorial Designs*, Stat-Ease Inc., Minneapolis.
- Stat-Ease Inc., 2021, *Identify Factors and Levels*, Stat-Ease Inc., Minneapolis.
- Stat-Ease Inc., 2021, *Identify Responses*, Stat-Ease Inc., Minneapolis.
- Stat-Ease Inc., 2021, *Mixture Designs*, Stat-Ease Inc., Minneapolis.
- Stat-Ease Inc., 2021, *Objectives and Design Options*, Stat-Ease Inc., Minneapolis.
- Stat-Ease Inc., 2021, *Response Surface Designs*, Stat-Ease Inc., Minneapolis.
- Stevens, S.L., 2021, Fat-Soluble Vitamins, *Nursing Clinics of North America*, 56(1): 33-45.
- Stoddard J.M., Nguyen, L., Mata-Chavez, H., & Nguyen, K., 2007, TLC plates as a convenient platform for solvent-free reactions, *Chemical Communications*, 12: 1240-1.
- Tardy, A.L., Pouteau, E., Marquez, D., Yilmaz, C., & Scholey, A., 2020, Vitamins and Minerals for Energy, Fatigue and Cognition: A Narrative Review of the Biochemical and Clinical Evidence, *Nutrients*, 12(1): 228.
- The United States Food and Drug Administration, 2019, *Guidelines for the Validation of Chemical Methods in Food, Feed, Cosmetics, and Veterinary Products*, 3<sup>rd</sup> Edition, The United States Food and Drug Administration, Maryland.
- Wadhwa, R.R. & Marappa-Ganeshan, R., 2023, T Test, diakses dari <https://www.ncbi.nlm.nih.gov/books/NBK553048/> pada 23 Mei 2024.
- Walls, D. & Loughran, S.T., 2011, *Protein chromatography: Methods and Protocols (Methods in Molecular Biology)*, 681.

- Wardhani, D.S. & Nurbayanti, I., 2017, Validasi Metode SNI 06-6989.12-2004 pada Penetapan Kesadahan Total dalam Air Permukaan Secara Kompleksiometri, *Buletin Teknik Litkayasa Akuakultur*, 15(2): 57-62.
- Wilchek, M. & Chaiken, I., 2000, *An overview of affinity chromatography (Methods in Molecular Biology)*, 147: 1-6.
- Williams, N.T., 2010, Probiotics, *American Journal of Health-System Pharmacy*, 67(6):449-58.