

## DAFTAR PUSTAKA

- Abdela, N., Jilo, K., Siraj, S., Adem, J. and Mohammed, A., 2016, Impact of Stress on Health and Productivity of Animal: A Review, *J. Nat. Sci. Res.*, 6(9), 45-51.
- Adkins, J.N., Varnum, S.M., Auberry, K.J., Moore, R.J., Angell, N.H., Smith, R.D., Springer, D.L. and Pounds, J.G., 2002, Toward a Human Blood Serum Proteome, Analysis by Multidimensional Separation Coupled with Mass Spectrometry, *Mol. Cell. Proteomics*, 947-955.
- Aebersold, R. and Mann, R.M., 2003, Mass Spectrometry-Based Proteomics, *Nature*, 422(6928), 198.
- Aguilar, M., 2003, *HPLC of Peptides and Proteins: Methods and Protocols*, *Methods in Molecular Biology*, Humana Press Inc., Totowa.
- Alfiraza, E.N., 2018, Identifikasi Peptida Spesifik pada Gelatin Babi Menggunakan *Liquid Chromatography-High Resolution Mass Spectrometry (LC-HRMS)*, *Tesis*, Universitas Gadjah Mada, Yogyakarta.
- American Veterinary Medical Association, 2013, *AVMA Guidelines for the Euthanasia of Animals*, AVMA, Schaumburg.
- Andrews, A.T., 1986, *Electrophoresis: Theory, Techniques, and Biochemical and Clinical Applications*, 2<sup>nd</sup> Ed., Oxford Science Publications, Oxford.
- Anil, M.H., 2012, *Effects of Slaughter Method on Carcass and Meat Characteristics in the Meat of Cattle and Sheep*, Agriculture and Horticulture Development Board UK, Kenilworth.
- Anonim, 2017, *Proteome Discoverer User Guide, Software Version 2.2*, Thermo Fisher Scientific, Inc., Waltham.
- Anonim, 2019, Introduction to SDS-PAGE – Separation of Proteins Based on Size, [www.sigmaaldrich.com](http://www.sigmaaldrich.com), diakses pada 10 Januari 2019.
- Antonioli, P., Bachi, A., Fasoli, E. and Righetti, P.G., 2009, Efficient Removal of DNA from Proteomic Samples Prior to Two-Dimensional Map Analysis, *J. Chromatogr. A.*, 1216(17), 3606-3612.
- Bader, S., Meyer-Kuhling, B., Gunther, R., Breithaupt, A., Rautenschlein, S. and Gruber, A.D., 2014, Anatomical and Histological Pathology Induced by Cervical Dislocation Following Blunt Head Trauma for On-Farm Euthanasia of Poultry, *J. App. Poult Res.*, 23(3), 546-556.

- Bairoch, A. and Apweiler, R., 2000, The SWISS-PROT Protein Sequence Database and Its Supplement TrEMBL in 2000, *Nucleic Acids Res.*, 28(1), 45-48.
- Biemann, K., 1992, Mass Spectrometry of Peptides and Proteins, *Annu. Rev. Biochem.*, 61, 977-1010.
- Blanck, H.M., Bowman, B.A., Cooper, G.R., Myers, G.L. and Miller, D.T, 2003, Laboratory Issues: Use of Nutritional Biomarkers, *J. Nutr.*, 133(3), 888S-894S.
- Capelastegui, A., Espana, P.P. and Quintana, J.M., 2004, Improvement of Process-of-Care and Outcomes After Implementing a Guideline for Management of Communityacquired Pneumonia: A Controlled Before-and-After Study, *ClinInfect Dis.*, 39, 955-963.
- Cosette, A., Dumas-Gaudot, E., Renaut, J. and Sergeant, K., 2012, Gel-Based and Gel-Free Quantitative Proteomics Approaches at A Glance, *J. Plant Genomics*, 2012.
- Cox, J. and Mann, M., 2011, Quantitative, High-Resolution Proteomics for Data-Driven Systems Biology, *Annu. Rev. Biochem.*, 80, 273-299.
- Cunningham, J.G., 2002, *Textbook of Veterinary Physiology*, 3<sup>rd</sup> Ed., W.B. Saunders Company, Philadelphia.
- DiFranco, M., Neco, P., Capote, J., Meera, P. and Vergara, J.L., 2005, Quantitative Evaluation of Mammalian Skeletal Muscle as a Heterologous Protein Expression System, *Protein Expression and Purification*, 47, 281-288.
- Doherty, M.K., McLean, L., Hayter, J.R., Pratt, J.M., Duncan, H.L., Robertson, D.H., El Shafei, A. Gaskell, S.J. and Beynon, R.J., 2004, The Proteome of Chicken Skeletal Muscle: Changes in Soluble Protein Expression During Growth in a Layer Strain, *Proteomics*, 4(7), 2082-2093.
- Domon, B. and Aebersold, R., 2006, Mass Spectrometry and Protein Analysis, *Sciences*, 312(5771), 212-217.
- Engelking, L.R., 2004, *Textbook of Veterinary Physiological Chemistry*, Teton New Media, Jackson.
- Farouk, M., 2013, Advances in the Industrial Production of Halal and Kosher Red Meat, *Meat Sci.*, 95, 805-820.
- Goksoy, E.O., McKinstry, L.J., Wilkins, L.J., Parkman, I. and Phillips, A., 1999, Broiler Stunning and Meat Quality, *Poult. Sci.*, 78(12), 1796-1800.

- Gundry, R.L., White, M.Y., Murray, C.I., Kane, L.A., Fu, Q., Stanley, B.A. and Eyk, J.E.V., 2010, Preparation of Proteins and Peptides for Mass Spectrometry Analysis in a Bottom-Up Proteomics Workflow, *Curr. Protoc. Mol. Biol.*, 9(1).
- Guo, D., Mant, C.T. and Hodges, R.S., 1987, Effects of Ion-Pairing Reagents on the Prediction of Peptide Retention in Reversed-Phase High-Performance Liquid Chromatography, *J. Chromatogr.*, 386, 205-222.
- Hames, B.D. and Rickwood, D., 1990, *Gel Electrophoresis of Proteins: a Practical Approach*, 2<sup>nd</sup> Ed., Oxford University Press, Oxford.
- Han, X., Aslanian, A. and Yates, J.R., 2008, Mass Spectrometry for Proteomics, *Curr. Opin. Chem. Biol.*, 12(5), 483-490.
- Haynes, P.A. and Yates, J.R., 2000, Proteome Profiling-Pitfalls and Progress, *Yeast*, 17(2), 81-87.
- Hoffman, E. and Stroobant, V., 2007, *Mass Spectrometry, Principle and Application*, 3<sup>th</sup> Ed., Wiley, Oxford.
- Holmes, A.L., Raper, R.N. and Heilig, J.S., 1998, Genetic Analysis of Drosophila Larval Optic Nerve Development, *Genetics*, 148(3), 1189-1201.
- Hsieh, E.J., Bereman, M.S., Durand, S., Valaskovic, G.A. and MacCoss, M.J., 2013, Effects of Column and Gradient Lengths on Peak Capacity and Peptide Identification in Nanoflow LC-MS/MS of Complex Proteomic Samples, *J. Am. Soc. Mass Spectrom.*, 24(1), 148-153.
- Huang, J.C., Huang, M., Yang, J., Wang, P., Xu, X.L. and Zhou, G.H., 2014, The Effects of Electrical Stunning Methods on Broiler Meat Quality: Effect on Stress, Glycolysis, Water Distribution, and Myofibrillar Ultra-Structures, *Poult. Sci.*, 93, 2087-2095.
- Hustoft, H.K., Malerod, H., Wilson, S.R., Reubsæet, L., Lundanes, E. and Greibrokk, T., 2012, *A Critical Review of Trypsin Digestion for LC-MS Based Proteomics, Integrative Proteomics*, InTech, Rijeka.
- Janson, J.C. and Ryden, L., 1998, *Protein Purification: Principle High Resolution Method and Application*, 2<sup>th</sup> Ed., John Wiley and Sons, Inc., New Jersey.
- Kahraman, H.A. and Gurbuz, U., 2016, Sarcoplasmic Proteins and Its Effect on Meat Quality Parameters, *J. Vet. Sci. Med. Diagn.*, 5(5).
- Kapteyn, J.C., Saidi, M.D., Dijkstra, R., Kars, C., Tjon, J.C., Weverling, G.J., de Vocht, M. L., Kompier, R., van Montfort, B. A., Guichoux, J-Y.,

- Goudsmit, J. and Lagerwerf, F. M., 2006, Haemagglutinin Quantification and Identification of Influenza A&B Strains Propagated in PER.C6(R) Cells: a Novel RP-HPLC Method, *Vaccine*, 24, 3137–3144.
- Karen, D., 2009, *In Prisoned Chickens, Poisoned Eggs: An Inside Look at the Modern Poultry Industry*, Book Publishing Company, Summertown.
- Kaufmann, A. and Bromirski, M., 2018, *Selecting the Best Q Exactive Orbitrap Mass Spectrometer Scan Mode for Your Application*, Thermo Fisher Scientific, Inc., Waltham.
- Kementerian Pertanian RI, 2018, [www.pertanian.go.id](http://www.pertanian.go.id), diakses pada 20 Maret 2019.
- Kenyon, G.L., DeMarini, D.M., Fuchs, E., Galas, D.J., Kirsch, J.F., Leyh, T.S., Moos, W.H., Petsko, G.A., Ringe, D., Rubin, G.M. and Sheahan, L.C., 2002, Defining the Mandate of Proteomics in the Post-Genomics Era: Workshop Report, *Mol. Cell. Proteomics*, 1(10), 763–780.
- Khopkar, S.M., 2003, *Konsep Dasar Kimia Analitik*, UI Press, Jakarta.
- Kiran, M., Naveena, B.M., Smrutirekha, M., Baswa, R.P., Banerjee, R., Praveen, K.Y., Venkatesh, C., Srikanth, R., 2019, Traditional Halal Slaughter without Stunning Versus Slaughter with Electrical Stunning of Sheep (*Ovis aries*), *Meat Sci.*, 148, 127-136.
- Krebs, J., Agellon, L.B. and Michalak, M., 2015, Ca(2+) Homeostasis and Endoplasmic Reticulum (ER) Stress: an Integrated View of Calcium Signaling, *Biochem. Biophys. Res. Commun.*, 460(1), 114-121.
- Kumar, D., Yadav, A.K. and Dash, D., 2017, Choosing and Optimal Database for Protein Identification from Tandem Mass Spectrometry Data, *Proteome Bioinformatics*, 1549, 17-29.
- Lange, E., Tautenhahn, R., Neuman, S. and Gropl, C., 2008, Critical Assessment of Alignment Procedures for LC-MS Proteomics and Metabolomics Measurements, *BMC Bioinformatics*, 9, 375.
- Langen, H. and Berndt, P., 2001, *Proteomics Databases*, Springer, New York.
- Linares, M.B., Nornez, R. and Vergara, H., 2007, Effect of Different Stunning and Modified-Atmosphere Packaging on the Quality of Meat from Spanish Manchego Light Lamb, *Small Ruminant Res.*, 108(1).

- Liu, H., Dasygov, R.G. and Yates, J.R., 2004, 3RDA Model for Random Sampling and Estimation of Relative Protein Abundance in Shotgun Proteomics, *Anal. Chem.*, 76(14).
- Ma'mun, M., Mura'i dan Nurjannah, 2006, *Tuntunan Penyembelihan Binatang Secara Islam*, MUI Kabupaten Sleman, Sleman.
- Maryam, S., Siswindari, Raharjo, T.J., Sudjadi and Rohman, A., 2016, Analysis of Porcine Contamination in Dendeng Using Mitochondrial D-Loop 686 and cyt b Gene Primers by Real Time Polymerase Chain Reaction, *Int. J. Food Prop.*, 19(1), 187-195.
- McLafferty, F.W., Breuker, K., Jin, M., Han, X., Jiang, H., Kong, X. and Begley, T.P., 2007, Top-Down MS: a Forward Complement to the High Capabilities of Proteolysis Proteomics, *FEBS J.*, 274, 6256-6268.
- Michalski, A., Damoc, E., Hauschild, J., Lange, O., Wiegand, A., Makarov, A., Nagaraj, N., Cox, J., Mann, M. and Horning, S., 2011, Mass Spectrometry-based Proteomics Using Q Exactive, A High-Performance Benchtop Quadrupole Orbitrap Mass Spectrometer, *Mol. Cell Proteomics*, 19(9).
- Moriwaki, K.T. and Shiroishi, H.Y., 1994, *Genetic In Wild Mice, Its Application to Biomedical Research*, Karger, Tokyo.
- Mueller, C., Muller, B. and Perruchoud, A.P., 2008, Biomarkers : Past, Present, and Future, *Swiss Med Wkly*, 138(15-16).
- Murray, J.I., Whitfield, M.L., Trinklein, N.D., Myers, R.M., Brown, P.O. and Botstein, D., 2004, Diverse and Specific Gene Expression Responses to Stresses in Cultured Human Cells, *Mol. Biol. Cell.* 15(5), 2361-2374.
- Murray, R.K., 2003, *Biokimia Klinik*, edisi keempat, EGC, Jakarta.
- Mustofa, L., Mahaputra, L., Dachlan, Y.P., Rantam, F.A. dan Hinting, A., 2006, Analisis Densitometrik Protein Reseptor Fertilisasi Pada Zona Pelusida Kamibing Sebagai Kandidat Bahan Imunokontrasepsi, *Media Kedokteran Hewan*, 22(2).
- Myres, P. and Armitage, D., 2004, *Rattus norvegicus*, <http://animaldiversity.ummz.umich.edu/>, diakses 5 Januari 2019.
- Nakyinsige, K., Fatimah, A., Aghwan, Z. A., Zulkifli, I., Goh, Y. M. and Sazili, A. Q., 2014, Bleeding Efficiency and Meat Oxidative Stability and Microbiological Quality of New Zealand White Rabbits Subjected to Halal

Slaughter Without Stunning and Gas Stun Killing, *Asian-Australas. J. Anim. Sci.*, 27(3), 406–413.

Nuhriawangsa, A.M.P., 1999, *Pengantar Ilmu Ternak Dalam Pandangan Islam: Suatu Tinjauan Tentang Fiqih Ternak*, Program Studi Produksi Ternak, Fakultas Pertanian, Universitas Sebelas Maret, Surakarta.

Norrgran, J., Williams, T.L., Woolfitt, A.R., Solano, M.I., Pirkle, J.L. and Barr, J.R., 2009, Optimization of Digestion Parameters for Protein Quantification, *Anal. Biochem.*, 393, 48-55.

Ogata, H., Goto, S., Sato, K., Fujibuchi, W., Bono, H. and Kanehisa, M., 1999, KEGG: Kyoto Encyclopedia of Genes and Genomes. *Nucleic Acids Res.*, 27, 29–34.

Orduna, A.R., Husby, E., Yang, C.T., Ghosh, D. and Beaudy, F., 2017, Detection of Meat Species Adulteration Using High-Resolution Mass Spectrometry and a Proteogenomics Strategy, *Food Addit. and Contam.*, 34(7).

Ortrea, I., O'Connor, G. and Maquet, A., 2016, Review on Proteomics for Food Authentication, *Proteomics*, 147, 212-225.

Pan, S., Zhang, H., Rush, J., Eng, J., Zhang, N. and Patterson, D., 2005, High-Throughput Proteome-Screening for Biomarker Detection, *Mol. Cell. Proteomics*, 4(2), 182-190.

Pandey, A. and Mann, M., 2000, Proteomics to Study Genes and Genomes, *Nature*, 405, 837-846.

Parry, R.T., 1989, *Technological Development In Preslaughter Handling and Processing*, Elsevier, Amsterdam.

Pavia, D.L., Lampman, G.M., Kriz, G.S. and Vyvyan, J.A., 2009, *Introduction to Spectroscopy*, 4<sup>th</sup> Ed., Cengage Learning, Boston, 441-442.

Raharjo, T.J., Cahyaningtyas, W., Surajiman, Istini, and Pranowo, D., 2012, Validation of PCR-RFLP Testing Method to Detect Porcine Contamination in Chicken Nugget, *Indones. J. Chem.*, 12(3), 302-307.

Rahmawati, Sismindari, Raharjo, T.J., Sudjadi, Rohman, A., 2016, Analysis of Pork Contamination in Abon Using Mitochondrial DLoop22 Primers Using Real Time Polymerase Chain Reaction Method, *IFRJ*, 23(1), 370-374.

Ramanathan, R., Zhong, R., Blumenkrantz, N., Chowdhury, S.K. and Alton, K.B., 2007, Response Normalized Liquid Chromatography Nanospray



- Ionization Mass Spectrometry, *J. Am. Soc. Mass Spectrom*, 18, 1891-1899.
- Rangarajan, S., 2011, Von Willebrand Factor Two Sides and the Edge of a Coin, *Haemophilia*, 17(1), 61-64.
- Rasband, W.S., 2018, ImageJ, <https://imagej.nih.gov/ij/>, National Institutes of Health, Bethesda.
- Rebecchi, K.R., Go, E.P., Xu, L., Woodin, C.L., Mure, M. and Desaire, H., 2011, A General Protease Digestion Procedure for Optimal Protein Sequence Coverage and PTM Analysis of Recombinant Glycoproteins: Application to the Characterization of HLOXL2 Glycosylation, *Anal. Chem.*, 83(22), 8484-8491.
- Reed, G., 1975, *Enzymes in Food Processing*, 2<sup>nd</sup> Ed., Academic Press, New York.
- Riddle, L.A. and Guiochon, G., 2006, Influence of Mobile Phase Gradients on the Retention and Separation of Peptides from a Cytochrome-c Digest by Reversed-Phase Liquid Chromatography, *Chromatographia*, 64, 121-127.
- Robinson, T., 1995, *Kandungan Organik Tumbuhan Tinggi*, ITB, Bandung.
- Rochat, B., 2018, *Quantitative and Qualitative LC-High-Resolution MS: The Technological and Biological Reasons for a Shift of Paradigm, Recent Advances in Analytical Chemistry*, IntechOpen, Lausanne.
- Roepstroff, P., and Fohlmann, J., 1984, Proposal for a Common Nomenclature for Sequence Ions in Mass Spectra of Peptides, *Biomed. Mass Spectrom.*, 11(11), 601.
- Romero-Gonzalez, R. and Frenich, A.G., 2017, *Applications in High Resolution Mass Spectrometry: Food Safety and Pesticide Residue Analysis*, 1<sup>st</sup> Ed., Elsevier, Amsterdam.
- Rosen, S.D., 2004, Physiological Insights into Shechita, *Vet. Rec.*, 154(24), 759-765.
- Rosenberg, I.M., 1996, *Protein Analysis and Purification*, 2<sup>nd</sup> Ed., Springer Science, Boston.
- Saad, S.M.D., 2014, Meat Quality and Muscle Proteome of Commercial Broiler Chickens Subjected to Preslaughter Electrical Stunning and Gas Killing, *Thesis*, Universiti Putra Malaysia, Serdang.

- Salwani, M.S., Adeyemi, K.D., Sarah, S.A., Vejayan, J., Zulkifli, I. and Sazili, A.Q., 2015, Skeletal Muscle Proteome and Meat Quality of Broiler Chickens Subjected to Gas Stunning Prior Slaughter or Slaughtered Without Stunning, *CyTA – J. Food*, 14(3), 375-381.
- Samah. N.A., Azura, A., and Faridah, Y., 2011, Over Expression of Voltage Dependent Anion Channel 2 (VDAC2) in Muscles of Electrically Stunned Chickens, *Eng. IIUM J.*, 12(4).
- Samonig, M., Schwahn, A., Cook, K., Oliver, M. and Swart, R., 2016, *SMART Digest Compared to Classic In-Solution Digestion of Rituximab for In-Depth Peptide Mapping Characterization*, Thermo Scientific, Runcorn.
- Samonig, M., Scheffler, K., Swart, R. and Josephs, J., 2016, *High-Throughput Peptide Mapping with the Vanquish UHPLC System and the Q Exactive HF Mass Spectrometer*, Application Note 1135, Thermo Scientific, Runcorn.
- Schwanhausser, B., Gossen, M., Dittmar, G. and Selbach, M., 2008, Global Analysis of Cellular Protein Translation by Pulsed SILAC, *Proteomics*, 9(1), 205-209.
- Silva, J.C., Gorenstein, M.V., Li, G-Z., Vissers, J.P.C. and Geromanos, S.J., 2006, Absolute Quantification of Proteins by LCMSE: A Virtue of Parallel MS Acquisition, *Mol. Cell. Proteomics*, 5, 144–156.
- Simpson, D.M. and Beynon, R.J., 2010, Acetone Precipitation of Proteins and the Modification of Peptides, *J. Proteome Res.*, 9(1), 444-450.
- Smith, B.J., 2002, *Protein Sequencing Protocols*, Humana, Totowa.
- Steen, H. and Mann, M., 2004, The ABC's (and XYZ's) of Peptide Sequencing, *Mol. Cell Bio.*, 5, 699-711.
- Suder, P., Bierczynska, A., Konig, S. and Silberring, J., 2004, Acid-Labile Surfactant Assists In-Solution Digestion of Proteins Resistant to Enzymatic Attack, *Rapid Commun. Mass Spectrom.* 18 (2004) 822–824.
- Sudjadi, H.S., Warandi, T., Sepminarti and Rohman, A., 2016, Analysis of Porcine Gelatin DNA in Commercial Capsule Shell Using Real Time Polymerase Chain Reaction for Halal Authentication, *Int. J. Food Prop.*, 19(9).
- Szklarczyk, D., Gable A.L, Lyon, D., Junge, A., Wyder, S., Huerta-Cepas, J., Simonovic, M., Doncheva, N.T., Morris, J.H., Bork, P., Jensen, L.J. and von Mering, C., 2019, STRING v11: Protein-Protein Association



Networks with Increased Coverage, Supporting Functional Discovery in Genome-Wide Experimental Datasets. *Nucleic Acid Res.*, 47, D607-613.

Tan, A., 2018, The Function of a Tris Buffer in DNA Extraction, *www.sciencing.com*, diakses pada 5 Januari 2019.

The UniProt Consortium, 2019, UniProt: A Worldwide Hub of Protein Knowledge. *Nucleic Acid Res.*, 47, D506-D515.

Velarde, A., Gispert, M., Diestre, A. and Manteca, X., 2003, Effect of Electrical Stunning on Meat and Carcass Quality in Lambs, *Meat Sci.*, 63(1).

Vergara, H., Linares, M.B., Berrugaand, M.I. and Gallego, L., 2005, Meat Quality in Suckling Lambs: Effect of Preslaughter Handling, *Meat Sci.*, 69(3).

Wang, N.S., 2009, *Enzyme Purification by Acetone Precipitation*, University of Maryland, College Park.

Weisser, H. and Choudhary, J.S., 2017, Targeted Feature Detection for Data-Dependent Shotgun Proteomics, *J. Proteome Res.*, 16(8), 2964-2974.

Westmermer, R., 2005, *Electrophoresis in Practice: A Guide to Methods and Applications of DNA and Protein Separation*, 4<sup>th</sup> Ed., Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim.

Wierenga, S.K., Zocher, M.J., Mirus, M.M., Conrads, T.P., Goshe, M.B. and Veenstra, T.D., 2002, A Method to Evaluate Tryptic Digestion Efficiency for High-Throughput Proteome Analyses, *Rapid Commun. Mass Spectrom.*, 16, 1404-1408.

Wilkins, M.R., Pasquali, C., Appel, R.D., Ou, K., Golaz, O. and Sanchez, J.C., 1996, From Proteins to Proteomes: Large Scale Protein Identification by Two-Dimensional Electrophoresis and Amino Acid Analysis, *Biotechnol.*, 14(1), 61-65.

Winarno, F.G., 1992, *Kimia Pangan and Gizi*, Gramedia Pustaka Utama, Jakarta.

Yu, T.Y., Morton, J.D., Clerens, S. and Dyer, J.M., 2015, Data for In-Depth Characterisation of the Lamb Meat Proteome from *longissimus lumborum*, *Data in Brief*, 3, 143-148.

Zaman, R., Hamzah, M.N., Abdurrazq, N.B., Hamzah, M.S. and Mohammad, T.T., 2012, Effect of Different Methods of Slaughtering on Protein Expression in Chicken Meat, *Eng. IIUM J.*, 13(1).