

CURRICULUM VITAE

Name: (M.R.) Jisnuson SVASTI

Born: 25 September 1947; Bangkok, Thailand.

Marital Status: Married (8/8/68) to (M.R.) Phromchatra

Daughters: Sasibha (17/4/75), Chandrabha (20/5/78)



Positions:

- Director, Laboratory of Biochemistry, Chulabhorn Research Institute, 54 Kamphaeng Phet 6, Talat Bang Khen, Laksi, Bangkok 10210, Thailand, 1990-present
- Emeritus Professor of Biochemistry, Mahidol University, Rama VI Road, Bangkok 10400, Thailand, 2012-present

Contact Details:

Telephone:

Chulabhorn Research Institute: (+66-2)-5538561(office),(+66-2)-5538560(Biochem Lab)

Mahidol University;(+66-2)-2015845, secretary(+66-2)-2015840

Mobile:(+66-81)-8212135; Fax:(+66-2)-259-6634(home)

E-mail: jisnuson.sva@mahidol.ac.th; jisnuson@cri.or.th, jisnuson@gmail.com

Website: https://research.cri.or.th/lab/biochemistry/?page_id=192

https://biochemistry.sc.mahidol.ac.th/?page_id=875

Education: Educated in England (1954-1972)

- Cheam School, Headley, Nr. Newbury, Berkshire, 1957-1960
- Rugby School, Rugby, Warwickshire, 1960-1965
- Trinity College, Cambridge University, 1965-1972

Degrees:

- B.A.(Hons) Natural Sciences (Biochemistry), University of Cambridge, U.K., 1968
- M.A., Natural Sciences, University of Cambridge, U.K. 1972

- Ph.D., MRC Laboratory of Molecular Biology, University of Cambridge, U.K. *Thesis title:* Sequence Studies on Mouse Immunoglobulins. *Supervisor:* Dr. Cesar Milstein, F.R.S. (Nobel laureate), 1972
- D.Sc. (*Honoris causa*), Biochemistry, Mahidol University, Thailand, 2013
- D.Sc. (*Honoris causa*), Biochemistry, Suranaree University of Technology, Thailand, 2015

Previous Experience:

- Lecturer (1972-1975), Assistant Professor (1975-1978), Associate Professor (1979-1982), Department of Biochemistry, Faculty of Science, Mahidol University, Bangkok, Thailand.
- Senior Research Associate, Department of Human Biological Chemistry and Genetics, University of Texas Medical Branch, Galveston, Texas 77550, U.S.A., 1976-1977
- Professor of Biochemistry, Mahidol University, Bangkok, Thailand, 1982-2012
- Chairman, Department of Biochemistry, Faculty of Science, Mahidol University, 1980-84
- Associate Dean, Faculty of Science, Mahidol University, 1996-1997
- Vice-President for International Relations, Mahidol University, 1997-1999
- Head, Center for Excellence in Protein Structure and Function, Faculty of Science, Mahidol University, Bangkok, Thailand, 2001-2012
- Dean, Faculty of Graduate Studies, Mahidol University, Bangkok, Thailand, 2005-2007
- Chair, International Relations Policy Committee, Mahidol University, 2007-2010, 2015-18
- Faculty Member, Applied Biological Sciences Program, Chulabhorn Graduate Institute, since 2015-

Research Activities

General interests in studying structure-function relationships in proteins and enzymology. Past experience includes study of Plasma Proteins, Proteins unique to the male reproductive system, Abnormal hemoglobins. Current research interests include: Inborn errors of metabolism; Protein changes in cancer, anti-cancer agents from natural products; Glycosidase enzymes and glycosides; Protein changes caused by environmental contamination.

Professional Societies

- Member, Science Society of Thailand, 1972-present
- Member, Biochemical Society, U.K., 1981-2010
- Member, Physics Society, Thailand, 1986-present

- Member, Chemical Society, Thailand, 1991-present
- Member, Thai Biotechnology Society, 1992-present
- Member, Japanese Society for Bioscience, Biotechnology & Agrochemistry, 1995-2005
- Member, Protein Society, U.S.A., 1997-present
- Member, Society for Glycobiology, U.S.A., 2001-present
- Member, Genetics Society of Thailand, 2018-present

International Activities

- Coordinating Committee, Asian Network of Biological Science 1979-1981
- Treasurer, Federation of Asian & Oceanian Biochemists, 1980-1986
- President-Elect, Federation of Asian and Oceanian Biochemists, 1989-1990
- President, Federation of Asian and Oceanian Biochemists (FAOB), 1990-1992
- Past President, Federation of Asian and Oceanian Biochemists and Molecular Biologists (FAOBMB), 1993-1994
- Chairman, Organising Committee, Eleventh FAOBMB Symposium on *Biopolymers and Bioproducts: structure, function and applications*, Bangkok, 15-18 November 1994
- Member, Committee on Symposia, International Union of Biochemistry and Molecular Biology (IUBMB), 1996-2002
- Thai Delegate to International Union of Biochemistry and Molecular Biology 1996-2009
- Governing Council, Asia-Pacific International Molecular Biology Network (A-IMBN) 1998-present
- Membership Advisory Committee, Biochemistry and Biophysics (2001-2005), Structural, Cell and Molecular Biology (2010-2015), The World Academy of Sciences (TWAS)
- Editorial Board, *Molecules and Cells*, Korean Society of Molecular and Cellular Biology, 2003-2019
- Health Committee, EAGLES (European Action on Global Life Sciences), 2003-2009
- Council Member, Asian and Oceanic Human Proteome Organization, 2004-2016
- Treasurer, Federation of Asian Scientific Academies & Societies (FASAS), 2008-2012
- Management Board, Science Council of Asia (SCA), 2008-2011
- Steering Committee, Asia Pacific Protein Association (APPA), 2010-2017
- Member, Evaluation Committee, TWAS Biology Prize, 2011-2015
- Chairman, Organizing Committee, 7th Asian Oceania Human Proteome Organization / 9th Protein Society of Thailand Conference, Bangkok, 6-8 August 2014

- Chairman, Organising Committee, 9th Asian Science Camp, Thailand, 2-8 August, 2015
- International Committee, Asian Science Camp, 2015-present
- International Advisory Committee, Synchrotron Light Research Institute, Thailand, 2016-2019
- President, Asia Pacific Protein Association (APPA), 2017-2018

Local Activities

- Editorial Board (1974-84, 1992-93) and Executive Committee (1994-1998), Journal of the Science Society of Thailand
- Editor-in-Chief, Journal of the Science Society of Thailand (1985-1987), and Editor-in-Chief, *ScienceAsia*, Journal of the Science Society of Thailand (2001-2008)
- Member, Executive Committee (1985-87, 2000-12) and Advisor (2012-present), Science Society of Thailand under the Patronage of His Majesty the King
- Chairman (1986-1987) and Advisor (1988-present), Biochemical Section, Science Society of Thailand
- Committee Member, National Research Council of Thailand (Agriculture & Biology Section), 1991-1998
- Board of Directors, Chumbot-Pantip Foundation, 1982-1991
- Chairman (2017-present) and Board of Directors (since 1984), Prajadhipok-Rambhai Barni Foundation
- Deputy Chairman (2012-present) and Board of Directors (since 1985), Memorial Foundation for H.M. King Rama VII-Queen Rambhai Barni
- Deputy Chair (2013-present) and Board of Trustees (since 1990), Cambridge-Thai Foundation
- Committee Member, National Research Council of Thailand (Chemical and Pharmaceutical Sciences Section), 2002-2016
- Honorary Jury, UNESCO-L'Oréal Women in Science Program, Thailand, 2002-present
- President and Founder, Protein Society of Thailand (2006-2020)
- University Council, Huachiew Chalermprakiet University, Bangkok, 2004-2015
- University Council, Mahidol University, Bangkok, 2005-2007
- President, Science Society of Thailand under the Patronage of H.M. the King, 2008-2011
- Board of Directors, National Science Museum, Thailand, 2008-2011
- Committee, The Promotion of Academic Olympiads and Development of Science Education Foundation (POSN) under the Patronage of H.R.H. Princess Galyani Vadhana Krom Luang Naradhiwas Rajanagarindra, 2008-present

- Board of Directors, Synchrotron Light Research Institute, Thailand, 2008-2013
- Chairman and Founder, Marsi Foundation, 2009-present
- University Council, Christian University, Thailand, 2009-2016
- Committee Member, Council for the Science and Technology Profession, 2009-2012
- Committee Member, Mom Chao Vudhividhu Foundation, 2011-present
- Chairman, Education Committee, Thai Toray Science Foundation, 2012-present
- University Council, Siam University, 2014-present
- Council Member, Chulaborn Graduate Institute, 2015-2016
- Expert Committee in Medicine and Public Health, National Research Council of Thailand (2017-2020)
- Subcommittee Member for International Higher Education Hub and Subcommittee Member for Promotion and Development of Research & Innovation, Office of the Higher Education Commission, 2020-present

Fellowships

- Coutts Trotter Research Studentship, Trinity College, Cambridge, 1968-1971
- Travel Fellowship, First International Symposium on Immunology, Gausdal, Norway, 1972
- Travel Fellowship, Third International Conference on Isozymes, New Haven, U.S.A., 1974
- IUB Travel Fellowship, 10th International Congress of Biochemistry, Hamburg, Germany, 1976

Local Awards, Honours and Decorations

- Mahidol University Prize for Excellence in Research: "Chromatin Structure and Nucleic Basic Proteins in Mammalian Male Germ Cells" (with Nongnuj Tanphaichitr and Prasert Sobhon), 1982
- Founding Member, Thailand Academy of Science and Technology (TAST), 1997
- Outstanding Researcher Award, Ministry of University Affairs, 1998
- Senior Research Fellow, Thailand Research Fund, 2001-2007
- Outstanding Scientist of Thailand Award, Foundation for the Promotion of Science and Technology under the Patronage of His Majesty the King, 2002
- Outstanding Researcher, Chemical Sciences and Pharmacy section, National Research Council of Thailand, 2003
- Outstanding Lecturer, Faculty Club, Faculty of Science, Mahidol University, 2003
- Exemplary Lecturer, Faculty Club, Mahidol University, 2004
- Outstanding Lecturer Award, Council of the University Faculty Senates of Thailand, 2005

- Sood Sangvichien Lecture and Gold Medal Award, 2009
- Mahidol University International Publications Award, 2010
- Serene Piboonniyom Keynote Lecture, 2016

International Honours

- Honorary Member, Federation of Asian and Oceanian Biochemists and Molecular Biologists, Inc. (FAOBMB), 1994
- Honorary Member, Philippine Society of Biochemistry and Molecular Biology, 1995
- Elected Fellow, The World Academy of Sciences (TWAS), 1996
- Member, Asia-Pacific International Molecular Biology Network (A-IMBN), 1998
- A-IMBN Distinguished Lecture at the 14th Asia-Pacific International Molecular Biology Network Conference, 2012

Royal Decorations

- Knight Grand Cross of the Most Noble Order of the Crown of Thailand, 1987
- Knight Grand Cross of the Most Exalted Order of the White Elephant, 1990
- Knight Grand Cordon (special class), Most Noble Order of the Crown of Thailand, 1993
- Knight Grand Cordon (special class) the Most Exalted Order of the White Elephant, 1998
- Dushdi Mala Medal, 2005

Summary of Research Grants

1974-1980	Rockefeller Foundation (Research in Reproductive Biology)
1975-1977	W.H.O. Task Force on Male Fertility (Protein changes specific to spermatogenesis and their potential applications)
1978-1981	Ford Foundation (Structure of chromatin and basic nuclear proteins in mammalian male germ cells)
1978-1981	Mahidol University (Structure, properties and mechanism of action of human plasma vitamin D binding protein)
1982-1984	Rockefeller Foundation (Effect of gossypol on the structure of chromatin and the metabolism of mammalian male germ cells)
1982-1984	Mahidol University (Studies of cytochrome P-450 in vitamin A-deficient rat)
1984-1986	National Centre for Genetic Engineering and Biotechnology (Isolation of genetic engineering materials for distribution in Thailand)
1984-1987	Mahidol University (Structure and properties of abnormal hemoglobins)

- 1990-1994 National Research Council of Thailand (Synthesis of oligosaccharides using glycosidase enzymes indigenous to Thailand)
- 1991-1999 Chulabhorn Research Institute: Medicinal and therapeutic applications of plant enzymes: structural analysis, protein engineering, and oligosaccharide synthesis
- 1992-present Chulabhorn Research Institute: Analysis of proteins, blood, and body fluids for diagnosis, counseling and treatment of genetic disease
- 1995-1996 European Union Grant in collaboration with Christopher Bucke (Structure and applications of Thai Rosewood β -glucosidase)
- 1998-2006 Chulabhorn Research Institute; Proteomic studies of cancer cells treated with bioactive compounds from Thai medicinal plants
- 2003-present Chulabhorn Research Institute: Oncoproteomics in Thailand (Proteomics and Functional Studies of Proteins and Glycoproteins in Cancer)
- 2007-present Chulabhorn Research Institute: Anticancer agents inhibiting metastasis, angiogenesis and reversal of drug resistance
- 2008-present Chulabhorn Research Institute: Proteomic investigations into the biological impact of pesticides and xenobiotics

Summary of Publications

ORCID: <http://orcid.org/0000-0002-2217-4517>; 266 Articles (234 research & 32 education/academic articles) listed in Scopus and ISI-WOS; 4,662 citations with H-index = 39 (Scopus); 6,635 citations with H-index = 48 (Google Scholar).

6 Other Academic Articles in International Journals; 30 Articles in Proceedings of International Conferences; 13 Articles in Thai or Thai Journals; 5 Textbook & Book Chapter, Manual(co-authored)

Selected Publications

A. Research Articles in International Journals

1. Svasti, J. and Milstein, C. (1970) Variability of Interchain Binding of Immunoglobulins: interchain bridges of mouse IgG1. *Nature(Lond.)* **228**: 933-935.
2. Svasti, J. and Milstein, C. (1972) The Disulphide Bridges of a Mouse Immunoglobulin G1 Protein. *Biochem. J.* **126**: 837-850.
3. Svasti, J. and Milstein, C. (1972) The Complete Amino Acid Sequence of a Mouse Kappa Light Chain. *Biochem. J.* **128**: 427-444.
4. Svasti, J. and Milstein, C. (1972) The Parallel Nature of the Interchain Disulphide Bonds of Immunoglobulins: studies on a mouse IgG1 myeloma protein. *Europ. J. Biochem.* **31**: 405-422.

5. Adetugbo, K., Poskus, E., Svasti, J., and Milstein, C. (1975) Mouse Immunoglobulin Subclasses: cyanogen bromide fragments and partial sequence of a gamma 1 chain. *Europ. J. Biochem.* **56**: 503-519.
6. Svasti, M.R. J. and Viriyachai, S. (1975) The Purification of Lactate Dehydrogenase Isozymes LDH-A4, LDH-B4 and LDH-C4 from Human Tissues. *J. Sci. Soc. Thailand* **1**: 57-71.
7. Pongsawasdi, P. and Svasti, J. (1976) The Heterogeneity of the Protamines from Human Spermatozoa. *Biochim. Biophys. Acta* **434**: 462-473.
8. Svasti, M.R. J., Prawatmuang, P., Vajanamarhutue, C., Kadjaphai, A., Wangthammang, S. and Talupphet, N. (1976) The Presence of Two IgG Subclasses in Waterbuffalo Immunoglobulins. *J. Sci. Soc. Thailand* **2**: 56-66.
9. Svasti, J. (1977) An Addition at the C-terminus of Water-Buffalo Immunoglobulin Lambda Chains. *Biochem. J.* **161**: 185-187.
10. Svasti, J. and Bowman, B.H. (1978) Human Group-Specific Component: changes in electrophoretic mobility resulting from vitamin D-binding and from neuraminidase digestion. *J. Biol. Chem.* **252**: 4188-4194.
11. Svasti, J. and Talupphet, N. (1979) Improvement in the Resolution of Human Sperm Protamines by Use of Iodoacetamide as Labelling Agent. *Biochim. Biophys. Acta* **577**: 221-225.
12. Svasti, J., Kurosky, A., Bennett, A. and Bowman, B.H. (1979) Molecular Basis for the Three Major Forms of Human Serum Vitamin D Binding Protein (Group-Specific Component). *Biochemistry* **18**: 1161-1167.
13. Toowicharanont P. and Svasti, J. (1980) A Logical Approach to the Isolation of Lactate Dehydrogenase Isozyme X from Human Testes: a general rationale for the isolation of homotetrameric LDH isozymes. *Experientia* **36**: 37-38.
14. Surarit, R. and Svasti, J. (1980) Effect of Ligand Binding on the Conformation of Human Plasma Vitamin D Binding Protein (Group-Specific Component). *Biochem. J.* **191**:404-410.
15. Surinrat, P., Svasti, J. and Surarit, R. (1981) Improved Purification and Fluorescence Changes upon Activation of Human Seminal Plasma Acidic Protease. *Biochim. Biophys. Acta* **659**: 38-47.
16. Anguravirutt, S. and Svasti, J. (1981) A New Procedure for the Purification of Rat Testis-Specific Histone TH2B Involving Affinity Related Chromatography. *Arch. Biochem. Biophys.* **210**: 412-416.
17. Wattanaseree, J. and Svasti, J. (1983) Human Testis-Specific Histone TH2B: Fractionation and Peptide Mapping. *Arch. Biochem. Biophys.* **225**: 892-897.

18. Wattanaseree, J., Svasti, J., Bubpaniroj, P. and Mitranond, V. (1984) Effect of Vitamin A Deficiency on the Testis-Specific Basic Proteins of the Rat. *J. Biochem.(Tokyo)* **95**: 179-186.
19. Reid, W.A., Vongsorasak, L., Svasti, J., Valler, M.J. and Kay, J. (1984) Identification of the Acid Proteinase in Human Seminal Fluid as a Gastricsin Originating in the Prostate. *Cell Tiss. Res.* **236**: 597-600.
20. Yongvanich, T. and Svasti, J. (1984) Structural Differences between Somatic H2B and Testis-Specific TH2B Histones of the Rat. *Experientia* **40**: 845-846.
21. Tanphaichitr, J., Svasti, J. and Sobhon, P. (1984) Molecular Mechanism of the Antifertility Effects of Gossypol: a review. *J. Sci. Soc. Thailand* **10**: 197-206.
22. Reid, W.A., Liddle, C.N., Svasti, J. and Kay, J. (1985) Gastricsin in the Benign and Malignant Prostate. *J. Clin. Pathol.* **38**: 639-643.
23. Vongsorasak, L. and Svasti, J. (1985) Inhibition of Liquefaction and Protein Degradation of Human Semen by Gossypol. *Int. J. Androl.* **8**: 472-486.
24. Vongsorasak, L. and Svasti, J. (1986) Gossypol Prevents Activation of Purified Proenzyme of Human Seminal Plasma Acidic Proteinase. *Biochim. Biophys. Acta.* **883**: 271-276.
25. Boontrakulpoontawee, P., Svasti, J., Fucharoen, S. and Winichagoon, P. (1987) Identification of Hb Lepore-Washington-Boston in Association with HbE in a Thai Female. *Hemoglobin* **11**: 309-316.
26. Yongsuwan, S., Svasti, J. and Fucharoen, S. (1987) Decreased Heat Stability Found in Hemoglobin Queens. *Hemoglobin* **11**: 567-570.
27. Svasti, J., Surarit, R., Srisomsap, C., Pravatmuang, P., Wasi, P., Fucharoen, S., Blouquit, Y., Galacteros, F., and Rosa, J. (1993) Identification of Hb Anantharaj [$\alpha 11(A9)Lys \rightarrow Glu$] as Hb J- Wenchang-Wuming [$\alpha 11(A9)Lys \rightarrow Gln$]. *Hemoglobin* **17**: 453-455.
28. Siriboon, W., Srisomsap, C., Winichagoon, P. Fucharoen, S., and Svasti, J. (1993) Identification of Hb C [$\beta 6(A3)Glu \rightarrow Lys$] in a Thai Male. *Hemoglobin* **17**: 419-426.
29. Svasti, J., Boontrakulpoontawee, P., Yongsuwan, S., Sarikaputi, M., Siriboon, W., Srisomsap, C., Fucharoen, S., Winichagoon, P., Pravatmuang, P., and Surarit, R. (1994) Structural Analysis of Proteins in Thailand: Identification of abnormal hemoglobins. *Pure & Appl. Chem.* **66**: 105-110.
30. Suginta W. and Svasti, M.R.J. (1995) Purification and Properties of β -Galactosidase from *Hibiscus sabdariffa* L. var. altissima. *J. Sci. Soc. Thailand.* **21**: 183-186.
31. Sermsuvityawong, K., Svasti, M.R.J., Sawangaretrakul, P., Kisamanonta, P. and Chulavatnatol, M. (1995) Aggregation of Cassava Linamarase. *J. Sci. Soc. Thailand.* **21**: 283-292.

32. Surarit, R., Svasti, M.R.J., Srisomsap, C., Suginta, W., Khunyoshyeng, S., Nilwarangkoon, S., Harnsakul, P., and Benjavongkulchai, E. (1995) Screening of Glycohydrolase Enzymes in Thai Plant Seeds for Potential Use in Oligosaccharide Synthesis. *J. Sci. Soc. Thailand* **21**: 293-303.
33. Srisomsap, C., Svasti, J., Surarit, R., Champattanachai, V., Boonpuan, K., Sawangareetrakul, P., Subhasitanont, P. and Chokchaichamnankit, D. (1996) Isolation and Characterization of an Enzyme with β -D-Glucosidase/ β -D-Fucosidase Activities from *Dalbergia cochinchinensis* Pierre. *J. Biochem.* **119**: 585-590.
34. Benjavongkulchai, E., Surarit, R., Bucke, C. and Svasti, J. (1996) Synthesis of Oligosaccharides by Dextranucrase from a Local Strain of *Streptococcus mutans*. *J. Sci. Soc. Thailand* **22**: 105-110.
35. Surarit, R., Matsui, H., Chiba, S., Svasti, J. and Srisomsap, C. (1996) Chemical Modification of β -Glucosidase/ β -Fucosidase from *Dalbergia cochinchinensis* Pierre by Conduritol B Epoxide. *Biosci. Biotech. Biochem.* **60**: 1265-1268.
36. Surarit, R., Matsui, H., Chiba, S., Svasti, J. and Srisomsap, C. (1997) Evidence for the Presence of a Single Active Site in β -D-Fucosidase/ β -D-Glucosidase from *Dalbergia cochinchinensis* Seeds. *Biosci. Biotech. Biochem.* **61**: 93-95.
37. Wongwithoonyaporn, P., Bucke, C., and Svasti, J. (1998) Separation and Specificity Study of α -Mannosidases from *Vigna umbellata*. *Biosci. Biotech. Biochem.* **62**: 613-621.
38. Itchayanan, D., Svasti, J., Srisomsap, C., Winichagoon, P., and Fucharoen, S. (1999) Hb G-Coushatta [β 22(B4)Glu \rightarrow Ala] in Thailand. *Hemoglobin* **23**: 69-72.
39. Svasti, J., Srisomsap, C., Techasakul, S. and Surarit, R. (1999) Dalcochinin-8'-O- β -D-Glucoside and its β -Glucosidase Enzyme from *Dalbergia cochinchinensis*. *Phytochem.* **50**: 739-743.
40. Itchayanan, D., Svasti, J., Srisomsap, C., Winichagoon, P., and Fucharoen, S. (1999) Identification of Hb J Buda [α 61(E10)Lys \rightarrow Asn] in a Thai Female. *Hemoglobin* **23**: 183-186.
41. Srisomsap, C., Subhasitanont, C., Techasakul, S., Surarit, R., and Svasti, J. (1999) Synthesis of Homo and Hetero-Oligosaccharides by Thai Rosewood β -Glucosidase. *Biotechnol. Letts.* **21**: 947-951.
42. Svasti, J., Srisomsap, C., Itchayan, D., Limwuttiwong, A., Siriboon, W., Winichagoon, P. and Fucharoen, S. (1999) Recent Studies on the Abnormal Hemoglobins Found in Thailand. *J. Chem. Soc. Pak.* **21**: 281-288.
43. Yodsowan, B., Svasti, J., Srisomsap, C., Winichagoon, P., and Fucharoen, S. (2000) Hb Siam [α 15(A13)Gly \rightarrow Arg] is a GGT \rightarrow CGT Mutation in the α 1-Gene. *Hemoglobin* **24**: 71-74.

44. Lirdprapamongkol, K. and Svasti, J. (2000) Alkyl Glucoside Synthesis using Thai Rosewood β -Glucosidase. *Biotechnology Letters*. **22**: 1889-1994
45. Cairns, J.R.K., Champattanachai, V., Srisomsap, C., Wittman-Liebold, B., Thiede, B., and Svasti, J. (2000) Sequence and recombinant expression of Thai Rosewood β -glucosidase/ β -fucosidase, a glycosylated family 1 glycosyl hydrolase. *J. Biochem.* **128**: 999 -1008.
46. Imai, K., Tientadakul, P., Opartkiattikul, N., Luenee, P., Winichagoon, P., Svasti, J. and Fucharoen, S. (2001) Detection of Haemoglobin Variants and Inference of Their Functional Properties by Complete Oxygen Dissociation Curve Measurements. *Brit. J. Haematol.* **112**: 483-7.
47. Svasti, S., Yodsowon, B., Sriphanich, R., Winichagoon, P., Boonkhan, P., Suwanban, T., Sawangareetrakul, P., Srisomsap, C., Ketudat-Cairns, J.R., Svasti, J. and Fucharoen, S. (2001) Association of Hb Hope [β 136(H14)Gly \rightarrow Asp] and Hb H Disease. *Hemoglobin* **25**: 429-435.
48. Svasti, J., Srisomsap, C., Wasant, P., Pangkanon, S., Tiensuwan, M., Boonpuan, K., Sawangareetrakul, P. and Liammongkolkul, S. (2001) Normal Plasma Free Amino Acid Levels in Thai Children. *J. Med. Assoc. Thailand.* **84**: 1558-1568.
49. Arthan, D., Svasti, J., Kittakoop, P., Pittayakhachonwut, D., Tanticharoen, M., and Thebtaranonth, Y. (2002) Antiviral isoflavonoid sulfate and steroidal glycosides from the fruits of *Solanum torvum*. *Phytochemistry* **59**: 459-463.
50. Turbpaiboon, C., Svasti, S., Sawangareetakul, P., Winichagoon, P., Srisomsap, C., Siritanaratkul, N., Wilairat, P., and Svasti, J. (2002) Hb Siam [α -15(A13)Gly(GGT) \rightarrow Arg(CGT)] is a typical alpha hemoglobinopathy without alpha thalassemic effect. *Hemoglobin* **26**: 77-81.
51. Sawangareetrakul, P., Svasti, S., Yodsowon, B., Winichagoon, P., Srisomsap, C., Svasti, J., and Fucharoen, S. (2002) Double Heterozygosity for Hb Pyrgos [β (EF7)Gly \rightarrow Asp] and Hb E [β 26(B8)Glu \rightarrow Lys] Found in Association with α -Thalassemia. *Hemoglobin* **26**: 191-196.
52. Srisomsap, C., Subhasitanont, P., Otto, A., Mueller, E.-C., Punyarit, P. Wittmann-Liebold, B. and Svasti, J. (2002) Detection of Cathepsin B Up-Regulation in Neoplastic Thyroid Tissues by Proteomic Analysis. *Proteomics* **2**: 706-712.
53. Ngiwsara, L., Srisomsap, C., Winichagoon, P., Fucharoen, S. and Svasti, J. (2003) Hb Kodaira II [β 146(HC3)His \rightarrow Gln] Detected In Thailand. *Hemoglobin* **27**: 37-39.

54. Lirdprapamongkol, K., Mahidol, C., Thongnest, S., Prawat, H., Ruchirawat, S., Srisomsap, C., Surarit, R., Punyarit, P., and Svasti, J. (2003) Anti-metastatic Effects of Aqueous Extract of *Helixanthera parasitica*. *J. Ethnopharmacol.* **86**: 253-256. Svasti, J., Phongsak, T., Sarnthima, R. (2003) Transglucosylation of Tertiary Alcohols using Cassava β -Glucosidase. *Biochem. Biophys. Res. Commun.* **305**: 470-475.
55. Champattanachai, V., Cairns, J.R.K., Shotelersuk, V., Keeratichamroen, S., Sawangareetrakul, P., Srisomsap, C., Kaewpaluek, V. and Svasti, J. (2003) Novel mutations in a Thai patient with methylmalonic acidemia. *Molec. Genet. Metab.* **79**: 300-302.
56. Opassiri, R., Cairns, J.R.K., Akiyama, T., Wara-Aswapati, O., Svasti, J. and Esen, E. (2003) Characterization of a rice β -glucosidase highly expressed in flower and germinating shoot. *Plant Science* **165**: 627-638.
57. Srisomsap, C., Sawangareetrakul, P., Subhasitanont, P., Panichakul, T., Keeratichamroen, S., Lirdprapamongkol, K., Chokchaichamnankit, D., Sirisinha, S. and Svasti, J. (2004) Proteomic Analysis of Cholangiocarcinoma Cell Line. *Proteomics* **4**: 1135-1144.
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