

## Understanding the poster numbering

Each poster number contains 2 components: the registration and an assigned number. For example, PP001-2 is the poster number of participant PP001 and the assigned number “2”. Use this assigned number to determine whether your presentation time would be in the morning or afternoon during the poster sessions. Please be by your poster during your assigned poster presentation time.

### Poster Numbers (from Abstracts submission)

**OC002-1 Kriengsak Lirdprapamongkol**  
Up-regulation of  $\beta$ IVa-tubulin isotype confers paclitaxel resistance in floating lung cancer cells

**PP001-2 Chris Verathamjamras**  
Label-free quantitative proteomic analysis of the secretomes from cholangiocarcinoma cell line, HuCCA-1

**PP006-3 Salila Pengthaisong**  
Structural analysis of *Thermoanaerobacterium xylanolyticum* TxGH116  $\beta$ -glucosidase mutants corresponding to pathogenic human GBA2 mutations

**PP007-4 Chamaiporn Beagbandee**  
Recombinant expression of GBA2 glucosylceramidase in *Escherichia coli*

**PP009-5 Pornthip Chawapun**  
Investigation and identification of YueB membrane receptor protein in *Bacillus subtilis* isolated from Thai natto

**PP011-6 Nipattha Srioun**  
Breast cancer detection *in vitro* model by *Helix pomatia* agglutinin lectin

**PP012-7 Yeongjoon Lee**  
Thermostabilities, structures, and dynamic features of cold shock proteins from thermophilic, psychrotrophic, and psychrophilic bacteria, studied by NMR spectroscopy

**PP015-8 Chulhee Kwak**  
Anti-tuberculosis activity of phloretin and its potential target protein

**PP016-9 Thakorn Sornwatana**  
M-Brucin, an antibacterial peptide against *Staphylococcus epidermidis* and *Streptococcus pyogenes*

**PP018-10 Jaruwat Siritapetawee**  
Purification and hemagglutination activity of a lectin-like protein from *Euphorbia cf. antiquorum* latex

**PP019-11 Parthompong Ves-urai**  
Optimized method for preparation of secreted protein from *Chlamydomonas reinhardtii* cultured medium as a model for harvesting recombinant protein

**PP022-12 Narita Thungsatianpan**  
Delivery of shRNA by cell penetrating peptides for protection of shrimp from white spot syndrome virus

**PP023-13 Ratana Charoenwattanasatien**  
Structural analysis of Calredoxin from *Chlamydomonas reinhardtii*

**PP024-14 Atika Hanoum Rahasta**  
Activator role of bioactive molecules from CSN1S2 for glycolysis metabolism

**PP030-15 Fatchiyah Fatchiyah**  
Differential biological function of caprine milk alpha-S2 casein protein to regulate activities on signal transduction gene cascade at the cellular level

**PP033-16 Aisaraphon Phintha**  
Investigation on mechanism and substrate specificity of flavin-dependent tryptophan halogenase

**PP034-17 Mohd Shukuri Mohamad Ali**  
Molecular cloning, expression and *in silico* analysis of a cold-active organic solvent tolerant lipase from an Antarctic *Pseudomonas* sp

**PP035-18 Duangthip Trisrivirat**  
Key catalytic features control oxidase and monooxygenase activities of L-amino acid oxidase/monooxygenase

**PP036-19 Litavadee Chuaboon**  
Engineering of pyranose 2-oxidase for substrate specificity

**PP037-20 Sunaree Choknud**  
Transglucosylation of antibiotics by Os9BGlu31  $\beta$ -transglucosidase

**PP038-21 Karunambigai Arthanareeswaran**  
Heterologous cloning of glucosylceramide synthase into yeast expression vector pPICZBAKI

**PP039-22 Jittima Phonbuppha**  
Development and validation of bacterial luciferase as a reliable eukaryotic bioreporter system

**PP041-23 Pratchaya Watthaisong**  
Studies of 4-hydroxy-2-keto-heptane-1,7-dioate aldolase from *Acinetobacter baumannii*

**PP043-24 Kadsada Sala**  
Recombinant expression of OsXyl1  $\beta$ -xylosidase in *Pichia pastoris*

**PP046-25 Chutima Kaewpiboon**  
MicroRNA (miR)-27b-3b targets sprouty2 and promote malignant cancer phenotypes in human lung cancer (A549) cell lines

**PP047-26 Akkarawit Prawisut**  
Expression, purification, and characterization of rice (*Oryza sativa*)  $\beta$ -D-glucan exoglucanase

**PP048-27 Piriya Luangwattananun**  
Improved tri-functional enzyme with SOD, catalase and cell-permeable activities: enzymatic activities and thermostability enhancement

**PP052-28 Peeranat Jatooathaweecho**  
Prediction of active human glucosylceramidase GBA2 isoforms by homology modeling

**PP053-29 Adisak Romsang**  
Activation of Reactive Chlorine Species-mediated stress response protein through AraC-family transcriptional regulator in *Pseudomonas aeruginosa*

**PP054-30 Chotika Gosalawit**  
Engineering of docosahexaenoic acid (DHA) metabolic enzymes in *Pichia pastoris*

**PP058-31 Tantip Boonsong**  
*In vitro* protective effect of germinated brown rice extracts on cadmium-induced oxidative stress in JEG-3 placental cells

**PP060-32 Jeongmin Han**  
NMR and X-ray crystallographic studies on chromatin remodeling components

**PP061-33 Pongsak Khunrae**  
Shrimp possesses a conserved apoptosis mechanism by which the caspase-3 activity is modulated by HtrA2 and IAP

**PP062-34 Intan Ria Neliana**  
Food safety assessment of transgenic sugarcane overexpressing genes for sucrose-phosphate synthase and sucrose transporter proteins

**PP063-35 Retnosari Apriasti**  
Expression of coat protein gene of *Sugarcane mosaic virus* (SCMV) in transgenic sugarcane (*Saccharum officinarum* L.)

**PP066-36 Juthamas Jaroensuk**  
Loss of a transfer RNA (C/U/A-2'-O)-methyltransferase alters cellular response to H<sub>2</sub>O<sub>2</sub> in *Pseudomonas aeruginosa*

**PP067-37 Sarunyaporn Maksup**  
Phenolic-associated proteins in germinating seeds of 'Pathumthani 1' rice

**PP068-38 Parunya Chaiyawat**  
Co-expression of different class I histone deacetylase isoforms in osteosarcoma: prognostic and therapeutic implications

**PP069-39 Anupong Joompang**  
Tyrosinase inhibitory activity of crocodile (*Crocodylus siamensis*) blood components and its active peptide

**PP070-40 Weeraya Phupiewkham**  
Antimicrobial activity of Crocodile (*Crocodylus siamensis*) leukocyte extract against *Propionibacterium acnes*: Application for Acne treatment

**PP071-41 Jiraporn Lueangsakulthai**  
Novel antioxidant and anti-inflammatory peptides from Siamese crocodile (*Crocodylus siamensis*) hemoglobin hydrolysates

**PP072-42 Sirinthip Sosiangdi**  
The protective effect of white blood cell extract from *Crocodylus siamensis* blood on *Propionibacterium acnes*-induced inflammation in RAW 264.7 macrophages

**PP073-43 Thanawan Srilert**  
Investigation of wound healing properties of *Crocodylus siamensis* serum on human keratinocyte cells (HaCaT)

**PP074-44 Surachai Maijaroen**  
Antimicrobial peptide analogs of *Crocodylus siamensis* Leucrocin I revealing anticancer activity and apoptotic induction on human colon cancer HCT-116 cells

- PP075-45 Preeyanan Anwised**  
Over-expression of hemoglobin from *Crocodylus siamensis* in *Pichia pastoris*
- PP076-46 Wisarut Payoungkiattikun**  
KT2 and RT2, two new anti-inflammatory peptides derived from leucocrocin I
- PP077-47 Napaporn Roamcharern**  
The study of oxygen affinity of cross-linked crocodile (*Crocodylus siamensis*) hemoglobin
- PP078-48 Nisachon Jangpromma**  
*Crocodylus siamensis* blood attenuates oxidative stress and apoptosis induced by hydrogen peroxide in a skin fibroblast cell line
- PP080-49 Yi-Zong Lee**  
Field-cycling NMR to detect slow-motion backbone dynamics in an early protein unfolding state
- PP082-50 Bordin Butr-Indr**  
Secretome profile analysis of drug resistance *Mycobacterium tuberculosis*
- PP083-51 Monsiri Chetkhetkran**  
Comparative study of protein-protein interaction profiles in four gram positive methicillin resistant bacteria
- PP084-52 Sumeth Imsoonthornruksa**  
Establishment of *in vivo* biotinylated human embryonic stem cells for protein-protein interaction study
- PP085-53 Haruki Nakamura**  
Phosphorylation on intrinsic disordered region of Ets1 yields a specific interaction among many fuzzy interactions
- PP088-54 Panupong Mahalapbutr**  
*In silico* screening of mannosone G derivatives against Human DNA topoisomerase II ATPase domain
- PP089-55 Koki Makabe**  
In cell construction of bispecific antibodies via protein trans-splicing
- PP092-56 Anan Yuenyao**  
Biochemical and structural characterization of transcription regulation by *Acinetobacter baumannii* HpaR
- PP094-57 Eukote Suwan**  
Identification of a novel  $\beta$ -glucosidase gene from bovine rumen samples via metagenomics technique
- PP096-58 Pattama Wapeesittipan**  
Millisecond protein dynamics does not control catalysis in Cyclophilin A – evidence from molecular dynamics simulations
- PP097-59 Yi-Chen Chen**  
X-ray and TEM evidences reveal new oligomerization mechanism of chemokine CCL5
- PP098-60 Sukanya Luang**  
Molecular characterisation of the wheat basic leucine zipper transcription factor TabZIP2 involved in drought
- PP101-61 Phiraya Pitchayatanakorn**  
Effects of the Y286A and Y492A mutations in beta-glucosidase from *Aspergillus niger*
- PP102-62 Sarintip Pongpakpian**  
Proteomics analysis for low nitrogen responsive proteins in leaves of *Oryza sativa* KDML 105
- PP107-63 Chaiyos Sirithanakorn**  
Investigation of the roles of allosteric domain arginine, aspartate, and glutamate residues of *Rhizobium etli* pyruvate carboxylase in relation to its activation by acetyl CoA
- PP110-64 Chartchai Krittanai**  
Analysis of proteomic expression and molecular induction during the molting stages of mud crab
- PP111-65 Pattana Srifah Huehne**  
Effect of cold temperature and methyl jasmonate on proteins related to secondary metabolites in Vanda orchid herb
- PP112-66 Duangtip Sudhan**  
Cloning, expression, and purification of proteins with unknown function from '*Candidatus Liberibacter asiaticus*', a causal agent for Huanglongbing disease in citrus plants
- PP113-67 Phakawat Chusuth**  
Dynamics behaviors of active and inactive EGFR TK domains with erlotinib bound
- PP115-68 Pattarawut Sopha**  
Domains of the ERAD transmembrane Hsp40 DNAJB12 are involved in ER stress sensing
- PP116-69 Watcharin Chumjan**  
Chitoporin from *Vibrio harveyi* : probing the effects of hydrogen bonds on sugar channel interactions
- PP117-70 Thanyaporn Srimahaeak**  
Roles of GidA and TrmE proteins on tRNA modification and virulence in *Pseudomonas aeruginosa* strain PA14

**PP118-71 Md Abu Reza**

Characterization of *Naja naja* snake venom from Bangladesh: study reveals the necessity of specific antivenom for snake bite treatment in Bangladesh

**PP119-72 Narumon Thongdee**

Identification and characterization of PA14 TrmB protein, a tRNA methyltransferase required for cellular survival under oxidative stress condition

**PP120-73 Punyawee Dulyayangkul**

Characterization of N-ethylmaleimide and hypochlorite inducible MarR-homolog regulator in *Pseudomonas aeruginosa*

**PP121-74 KMF Hoque**

Anticancer activity of *Morus letifolia* leaf and bark against Ehrlich's ascites carcinoma (EAC) cell line

**PP122-75 Natthaphorn Paramee**

Comparative proteomics on the effects of non-germinated and germinated colored rice extracts on colon cancer cells

**PP123-76 Pipop Saejia**

Understanding the progression of thyroid carcinomas promoted by perfluorinated compounds

**PP124-77 Ronok Zahan**

S-benzyl- $\beta$ -N-(2,4-dihydroxyphenyl)methylene dithiocarbazato acetonitrile nickel(II) [NiLX] as a new potent lead in cancer therapy

**PP127-78 Juthamard Chantaraamporn**

Quantitative proteomic analysis reveals differential expression levels of WGA-bound glycoproteins from serum of colorectal cancer patients

**PP130-79 Wilaiwan Kaenyng**

Crystal structure of a bovine rumen metagenomic  $\beta$ -glucosidase

**PP131-80 Kanokwan Lowhalidanon**

Role of the minimally modified low density lipoprotein (mm-LDL) cholesterol in atherosclerosis progression

**PP134-81 Kamonchanok Chooyoung**

Phenotypic characterization of a *suhB* mutant in *Pseudomonas aeruginosa*

**PP139-82 Kazuaki Hakamad**

Expression and characterization of the *Plasmodium* translocon of the exported proteins component EXP2

**PP140-83 Takanori Satoh**

Comparison of thermostabilities among nucleoside diphosphate kinases from *Geobacillus* and *Anoxybacillus* bacteria

**PP145-84 Chun-ming Zhang**

The effects of polyphosphate on  $\beta_2$ -microglobulin amyloid fibrillation

**PP147-85 Ku-Sung Jo**

Bacterial production and application of a partially humanized recombinant Fab adopted from cetuximab

**PP149-86 Ruchanok Tinikul**

Effects of pH on protonation status of flavin intermediate in bacterial luciferase reaction

**PP150-87 Anuwat Aunkham**

Roles of the N-terminal plug in chitin binding with chitoporin from the marine bacterium *Vibrio harveyi*

**PP151-88 Phatcharida Jantaree**

Dimeric form of vanillin suppresses metastatic potential of liver cancer cells through inhibition of FAK/Akt signaling

**PP153-89 Natchanok Sritho**

A dual function of the periplasmic chitooligosaccharide binding protein (CBP) from the chitinolytic bacterium *Vibrio harveyi*

**PP154-90 Ki-Sung Yoo**

Recombinant protein production and physicochemical characterization of the inhibitory peptide-binding domains of CP2c

**PP155-91 Panida Khunkaewla**

Ligation of leukocyte surface antigen CD63 by anti-CD63 monoclonal antibody clone COS3A suppressed CD3-mediated T cell activation

**PP156-92 Sirithip Chuaijit**

RNAi knockdown of the Fatty Acyl-CoA Dehydrogenases affected mitochondrial supercomplex integrity in *Caenorhabditis elegans*

**PP157-93 Ji-Hye Yun**

Identification and optimization of efficient expression and purification condition of recombinant human dopamine 4 receptor for lipid cubic phase crystallization

**PP158-94 Sunisa Thongsom**

YKL-40 plays a role in tumor progression and chemoresistance, and a potential therapeutic target in cholangiocarcinoma

**PP160-95 Manutchanok Kongdin**

Rice Os4BGlu12 and Os4BGlu13 function as ABA-GE  $\beta$ -glucosidases

**PP162-96 Pukkavadee Netsirisawan**

The potential role of *O*-GlcNAcylation in breast cancer metastasis

**PP166-97 Waraporn Rernglit**

Amperometric enzyme biosensors with long life-time of glucose oxidase in colloidal chitin-soaked nanoporous carbon nanotube thin films as biocompatible immobilization matrix

**PP168-98 Chonnikan Hanpaibool**

Molecular dynamics simulations on MCR-1 in mono-zinc and di-zinc forms

**PP169-99 Wanarit Wimuttisuk**

Glycosylation is required for the catalytic activity of cyclooxygenase enzyme in the black tiger shrimp *Penaeus monodon*

**PP170-100 Yuki Ikeda**

Protein expression and characterization of Cu, Zn-superoxide dismutase from ginger

**PP171-101 Anupong Tankrathok**

The novel cathelicidin peptide from crocodile exhibit potent antimicrobial activity

**PP173-102 Rakrudee Sarnthima**

Protein hydrolysate preparation and antioxidant activities of peptides from silkworm pupa (*Bombyx mori* L.)

**PP174-103 Paripok Phitsuwan**

Carbohydrate binding module as an affinity tag for improving protein purification

**PP176-104 Supicha Rungjarernarrejitt**

Proteomic analysis of pancreas of streptozotocin-induced diabetes rat supplemented with purple rice bran

**PP178-105 Supaporn Baiya**

Crystallization and X-ray diffraction of rice Os4BGlu18 and its mutants

**PP179-106 Khajeelak Chiablaem**

Pomegranate extract inhibits metastatic potential in human lung carcinoma cells through PI3K/AKT Inhibition

**PP182-107 Lukana Ngiwsara**

Mutational analysis of *GBA* coding glucocerebrosidase enzyme in Thai patients with Gaucher disease

**PP184-108 Siriporn Keeratichamroen**

Characterization of 3D overlay cultures of A549 human lung cancer cells

**PP185-109 Phannee Sawangareetrakul**

Twenty decades of biochemical and molecular investigation of methylmalonic acidemia in Thailand

**PP186-110 Thirayut Sombun**

Anterior gradient 2 (AGR2) expression promotes metastasis of cholangiocarcinoma

**PP188-111 Naruemon Tunsakul**

Study of MfsE encoding membrane transporter protein regulated by lysR transcriptional regulator in *Stenotrophomonas maltophilia*

**PP190-112 Thanyada Rungrotmongkol**

Molecular dynamics simulation of potent inhibitors against Zika virus NS2B/NS3 serine protease

**PP192-113 Pantipa Subhasitanont**

Protein alterations in human hepatocellular carcinoma cell line after treatment with *Bridelia ovata* Decne extract

**PP195-114 Papada Chaisuriya**

Evaluation of *in vitro* three dimensional culture models of hepatocellular carcinoma cells for cytotoxicity test

**PP200-115 Nuri Charoennit**

Expression and purification of  $\alpha$ -L-rhamnosidase from *Lactobacillus acidophilus*

**PP202-116 Kamolwan Watcharatanyatip**

Label-free LC-MS/MS analysis of human plasma to identify cholangiocarcinoma biomarkers

**PP203-117 Daranee Chokchaichamnankit**

Urinary biomarkers for the diagnosis of cervical cancer by proteomics

**PP210-118 Jurairat Chittrakanwong**

Functional characterization of SmlEP in *Stenotrophomonas maltophilia*

**PP212-119 Waraporn Saentaweasuk**

Glioma pathogenesis-related protein 1 might associated with metastasis in cholangiocarcinoma cells

**PP228-120 Hansuk Buncherd**

Identification of cross-linked peptides from complex system using tag-based approach

**PP241-121 Duangjai Sittipol**

Cloning, overexpression, purification, and biochemical characterization of serine protease from *Thermomonospora curvata*

**PP259-122 Witchuda Prasatkaew**  
Induction and partial characterization of sea bass (*Lates calcarifer*) vitellogenin

**PP260-123 Wasinee Pongprayoon**  
Comparison of chitosan-induced protein patterns in rice (*Oryza sativa* L.) during drought stress

**PP261-124 Petlada Khositanon**  
Antioxidant activities of protein hydrolysate from fish sauce byproduct

**PP262-125 Nongluk Autarkool**  
The effect of L-glutamate on stability of MurI protein from *Pseudomonas aeruginosa* by small angle X-ray scattering

**OC011-126 Pornpun Aramsangtienchai**  
Peptide-based screening revealed defatty-acylation activity of HDAC8

**PP021-127 Naiyachon Thanitsorn**  
Cloning, expression, and characterization of pH-responsive repetitive polypeptide biomaterials

## Poster Numbers (from Proceedings submission)

**PP004-1 Pornpisut Sriworanun**  
Expression of mutant genes encoding SBgl3 and its substrates specificity changes

**PP005-2 Niramom Thamwiriyasati**  
Preliminary crystallization of the calcium-binding RTX region of CyaA toxin from *Bordetella pertussis*

**PP019-3 Parthompong Ves-urai**  
Optimized method for preparation of secreted protein from *Chlamydomonas reinhardtii* cultured medium as a model for harvesting recombinant protein

**PP044-4 Linh Thuy Tran**  
Evidence that rice Os5BGlu19 is a ferulic acid  $\beta$ -transglucosidase

**PP079-5 Chotika Yokthongwattana**  
Expression and toxicity test of 26SK protein from *Jatropha curcas* L.

**PP095-6 Rachaneegorn Gesorn**  
Disulfide bond engineering in glycoside hydrolase family 3  $\beta$ -glucosidase from *Aspergillus niger*

**PP099-7 Autchara Wongsathep**  
Identification and expression of multi-enzyme fatty acid reductase from luminous bacteria

**PP100-8 Jeranan Jantra**  
Overexpression of secretory leukocyte protease inhibitor promotes the proliferation and invasiveness of cholangiocyte

**PP102-9 Sarintip Pongpakpian**  
Proteomics analysis for low nitrogen responsive proteins in leaves of *Oryza sativa* KDML 105

**PP103-10 Pobthum Munkajohnpong**  
Screening of formate dehydrogenase activity from methylophilic bacteria

**PP108-11 Wasutorn Chankamngoen**  
Cytotoxicity screening of Bin toxin from *Lysinibacillus sphaericus* against human cancer cell lines

**PP109-12 Supanee Nimsanor**  
Molecular cloning and expression of truncated fragments of Vip3Aa from *Bacillus thuringiensis*

**PP126-13 Tanin-ek Sriwitool**  
Proteomic investigation of serum glycoproteins from colorectal cancer patient enriched by wheat germ agglutinin

**PP128-14 Phattara-orn Havanapan**  
Peptidomics analysis of latex serum *Phytophthora*-resistant rubber tree (*Hevea brasiliensis*), BPM24 and screening of antifungal proteins

**PP132-15 Aphichart Kanchanat**  
Fractionation of tyrosinase inhibition activity of protein hydrolysate derived from bee pollen (*Apis mellifera*) by enzymatic hydrolysis

**PP133-16 Lalita Silapasom**  
Cloning and expression of  $\alpha$ -glucosidase from *Weissella confusa* BBK-1

**PP135-17 Thanaporn Wae-hayee**  
The role of WT1 and cathepsin D in triple negative breast cancer cell lines

**PP136-18 Ekawit Threenet**  
Proteomic assessment of physiological disorder syndromes in longan (*Dimocarpus longan* L. "Daw") on mature stage using one-dimensional electrophoresis coupled with liquid

chromatography-tandem mass spectrometry (LC-MS/MS)

**PP175-19 Napachanok Mongkoldhumrongkul**

Partial protein profile of side-specific aortic valve endothelial cells

**PP177-20 Raphatphorn Navakanitworakul**

MALDI-TOF peptide signature in patient serum with cervical cancer

**PP201-21 Thepparit Traisaranakul**

Expression and purification of *Bacillus megaterium* penicillin G acylase in *Escherichia coli* cell system

**PP247-22 Fatma Taha**

Production and validation of monoclonal antibody against Programmed Death 1 (Anti-PD1 mAb) for *in vitro* immunotherapy studies