



POSTER PRESENTATIONS 47 to 232

November 16–18

† indicates abstract selected for short oral presentation – see programme for date and time

- †47 **Synthesis of lipid A and its novel analogues for investigation of the structural and conformational bases of their bioactivity**
Fujimoto Y., Akamatsu M., Adachi Y., Fukase Y., Kataoka M., Suda Y., Fukase K., Kusumoto S. (Osaka and Kagoshima, Japan)
- 48 **Synthesis of labeled lipid A for biofunctional analysis**
Fukase K., Kimura E., Murata S., Fujimoto Y., Kusumoto S. (Osaka, Japan)
- 49 **Synthesis of chlamydial tetra- and penta-acyl lipid A**
Zamyatina A., Sekljic H., Brade H., Kosma P. (Vienna, Austria and Borstel, Germany)
- 50 **Biological activity of chlamydial lipopolysaccharide on mononuclear phagocytes**
Tsutsumi-Ishii Y., Shimada K., Daida H., Toman R., Nagaoka I. (Tokyo, Japan and Bratislava, Slovak Republic)
- 51 **Biosynthesis of nucleotide-activated heptoses: new perspectives for structural biology and drug design**
Kosma P., Graziani A., Balla E., Zamyatina A., Messner P. (Vienna, Austria)
- 52 **Alteration of molecular conformation for artificial chiral receptors by embedding into lipid A membrane from *Erwinia carotovora***
Fukuoka S., Howe J., Koch M.H.J., Brandenburg K., Andrä J., Inanaga J. (Takamatsu and Fukuoka, Japan, Borstel and Hamburg, Germany)
- 53 **Physicochemical characterization and endotoxic activity of synthetic monophosphoryl analogues of lipid A**
Myers K.R., Johnson D.A., Andrä J., Howe J., Garidel P., Brandenburg K. (Hamilton, MT, USA and Borstel and Halle, Germany)
- 54 **Dephosphorylation of lipid A selectively reduces its activity to induce IL-1 β production**
Okamoto K., Kawasaki K., Nishijima M. (Tokyo, Japan)
- 55 **Cleavage and modification of the 1-phosphate group of *Helicobacter pylori* lipid A**
Tran A.X., Karbarz M.J., Raetz C.R., McGrath S.C., Cotter R.J., Trent M.S. (Johnson City, TN, Durham, NC, and Baltimore, MD, USA)
- 56 **Physicochemical characterization of carboxymethyl lipid A derivatives in relation to biological activity**
Seydel U., Schromm A.B., Brade L., Gronow S., Andrä J., Müller M., Koch M.H.J., Fukase K., Kataoka M., Hashimoto M., Kusumoto S., Brandenburg K. (Borstel and Hamburg, Germany and Osaka, Japan)
- 57 **Physicochemical characterization and biological activity of lipo-oligosaccharides from *Neisseria meningitidis***
Zughaier S., Stephens D.S., Andrä J., Lindner B., Brandenburg K. (Atlanta, GA, USA and Borstel, Germany)
- 58 **Differential induction of the TLR4-MyD88-dependent and independent signaling pathways by endotoxin**
Zughaier S., Zimmer S., Datta A., Carlson R., Stephens D. (Atlanta and Athens, GA, USA)
- 59 **Expression of phosphorylcholine and N-acetylneuraminic acid from *Haemophilus somnus* lipoligosaccharide**
Howard M., Elswaafi S., Duncan A., Wakarchuk W., Cox A.D., Lorenz E., Inzana T.J. (Blacksburg, VA, and Winston-Salem, NC, USA and Ottawa, Canada)
- 60 **Temperature dependence of the binding of endotoxins to the polycationic peptides polymyxin B and its nonapeptide**
Brandenburg K., David A., Howe J., Koch M.H.J., Andrä J., Garidel P. (Borstel, Hamburg, and Halle/Saale, Germany)
- 61 ***Francisella tularensis* live vaccine strain lipopolysaccharide does not bind to lipopolysaccharide-binding protein**
Barker J.H., Weiss J., Apicella M.A., Nauseef W.M. (Iowa City, IA, USA)
- 62 **Susceptibility of LPS mutants of *Actinobacillus pleuropneumoniae* to cationic antimicrobial peptides**
Jacques M., Ramjeet M., Cox A.D., St Michael F., Deslandes V., Labrie J., Gottschalk M. (St-Hyacinthe and Ottawa, Canada)
- †63 ***Helicobacter* varies LPS antigenic structure to evade surfactant protein D**
Khamri W., Moran A.P., Worku M.L., Karim Q.N., Walker M.M., Ferris J.A., Appelmelk B.J., Eggleton P., Reid K.B.M., Thursz M.R. (London, Oxford and Exeter, UK, Galway, Ireland, Amsterdam, The Netherlands)
- 64 **Construction of a deep-rough mutant in *Burkholderia cepacia* – characteristics of its LPS**
Gronow S., Blumenthal A., Lindner B. Noah C., Brade H. (Borstel, Germany)

- 65 Structural analysis of KDO region of core oligosaccharides isolated from smooth *Plesimonas shigelloides* and *Hafnia alvei* lipopolysaccharides**
Lugowski C., Niedziela T., Lukaszewicz J., Dzieciatkowska M., Kaszowska M., Jacymek W., Kenne L.
(Wroclaw, Poland and Uppsala, Sweden)
- 66 The complete structure of *Plesimonas shigelloides* O74 and the immunodominant epitope within its O-antigen**
Niedziela T., Dzieciatkowska M., Dag S., Lukaszewicz J., Kaszowska M., Jacymek W., Kenne L., Lugowski C.
(Wroclaw, Poland and Uppsala, Sweden)
- 67 Structural analysis of *Plesimonas shigelloides* lipid A molecules using MALDI-TOF and ESI mass spectrometry**
Lukaszewicz J., Dzieciatkowska M., Niedziela T., Kaszowska M., Jacymek W., Kenne L., Lugowski C.
(Wroclaw, Poland and Uppsala, Sweden)
- 68 Structure of the O-polysaccharide and serological studies of the lipopolysaccharide of *Proteus penneri* 60 classified into a new *Proteus* serogroup O70**
Sidoczyk Z., Zych K., Perepelov A., Baranowska A., Zablotni A., Shashkov A.S., Knirel Y.A.
(Lódź, Poland and moscow, Russian Federation)
- S69 Structure and serological studies of the O-polysaccharide of *Proteus penneri* 75: epitopes and subgroups of *Proteus* serogroup O73**
Sidoczyk Z., Zych K., Perepelov A., Baranowska A., Zablotni A., Knirel Y.A.
(Lódź, Poland and moscow, Russian Federation)
- 70 Characterization of LPS from the emerging human gastric pathogen *Helicobacter bizzozeronii***
Moran A.P., Ferris J.A., Kocharova N.A., Knirel Y.A., Widmalm G., Andersen L.P., Jansson P-E.
(Galway, Ireland, Moscow, Russian Federation, Novum and Stockholm, Sweden and Copenhagen, Denmark)
- 71 Lewis expression on LPS of Japanese *Helicobacter pylori*-associated cancer strains and importance of serological test format for detection**
Moran A.P., Perepelov A.V., Knirel Y.A., Amano K.-i., McGovern J.J., Jansson P-E.
(Galway, Ireland, Moscow, Russian Federation, Novum, Sweden and Akita, Japan)
- 72 Difference in the reactivity of *Helicobacter pylori*-lipopolysaccharides with patient sera in Poland and Japan**
Amano K., Sawataishi C., Chmiela M., Kaca W. (Lódź and Kielce, Poland)
- 73 Adaptation of Lewis antigen expression in LPS of *Helicobacter pylori* from experimentally infected rhesus monkeys**
Moran A.P., Ferris J.A., Perepelov A.V., Blaser M.J., Kocharova N.A., Knirel Y.A., Wirth H.-P., Jansson P-E.
(Galway, Ireland, Moscow, Russian Federation, Novum, Sweden and New York, NY, USA)
- 74 Relevance of Lewis epitopes on outer membrane vesicles of *Helicobacter pylori* to autoantibody production**
Moran A.P., Annuk H., Ferris J.A., Hynes S.O. (Galway, Ireland)
- 75 *Pseudomonas aeruginosa* glycosyltransferases WbpLXYZ: molecular cloning, overexpression, purification and first characterization**
Ramm M., Zentgraf E. (Jena, Germany)
- 76 Characterization of a galactosyltransferase gene, *lgtH*, in the biosynthesis of lipoligosaccharide (LOS) in *Neisseria meningitidis***
Tsai C-M., Zhu P., Boykins R. (Rockville, MD, USA)
- 77 Proteomic and functional analyses of membrane blebs isolated from *Neisseria meningitidis* serogroup B**
Post D., Zhang D.S., Eastvold J., Teghanemt A., Gibson B.W., Weiss J.P. (Iowa City, IA and Novata, CA, USA)
- 78 Antibiotic-induced release of Shiga toxin and endotoxin from *Shigella dysenteriae* type 1**
Jamil K.M., Salam M.A., Qadri F., Hassan F., Yokochi T. (Mohakhali, Bangladesh and Aichi, Japan)
- 79 New methods for the extraction, purification and quick extraction of bacterial endotoxins**
Caroff M., Tirsoaga A., El hamidi A., Hussein A., Novikov A., Adib-Conquy M., Werts C., Cavaillon J-M.
(Paris, France)
- 80 A rapid and sensitive assay to detect circulating endotoxin in children with diarrhea**
Tamura H., Ogura N., Ahmed T., Hassan F., Yokochi T. (Tokyo and Aichi, Japan and Dhaka, Bangladesh)
- 81 A quarter of a century revisited for endotoxin assay: role of 'internal standard' revisited**
Fukui H., Fujimoto M., Tsujita S., Matsumoto M., Kitano H., Bode Ch., Bode J.Cn.
(Nara, Japan and Stuttgart, Germany)
- 82 A cell line assay system for predicting the response of human blood to endotoxin**
Yamamoto A., Ochiai M., Kmachi K., Kataoka M., Toyozumi H., Arakawa Y., Horiuchi Y. (Tokyo, Japan)
- 83 A quantitative *in vitro* assay for detecting biological activity of endotoxin using peripheral blood**
Ochiai M., Kataoka M., Toyozumi H., Yamamoto A., Kamachi K., Arakawa Y., Horiuchi Y. (Tokyo, Japan)

- 84 Pseudomonas LPS, a most prominent contamination of water samples is vastly overestimated by LAL with regard to pyrogenicity**
Dehus O., Hartung T., Hermann C. (Konstanz, Germany)
- 85 An antimicrobial peptide amplifies LPS-induced exocytosis of horseshoe crab hemocytes**
Ariki S., Ozaki A., Koori K., Osaki T., Motoyama K., Inamori K., Kawabata S. (Fukuoka, Japan)
- 86 Apolipoprotein C1 augments the inflammatory response to LPS and correlates with improved infection-related survival in mice and humans**
Berbée J.F.P., Schippers E.F., van der Hoogt C.C., van Dissel J.T., Bakker-Woudenberg I.A.J.M., Havekes L.M., Rensen P.C.N. (Leiden and Rotterdam, The Netherlands)
- 87 Novel LPS-binding cyclic peptides and cytokine-binding peptides**
Yamamoto A., Ochiai M., Horiuchi Y., Suzuki M.F., Kobayashi T., Omi H., Takagi T., Niwa M. (Tokyo, Gunma, Miyagi and Osaka, Japan)
- 88 Serum factor other than LBP is necessary for soluble MD-2 to gain its function as part of the LPS receptor**
Ohnishi T., Muroi M., Tanamoto K. (Tokyo, Japan)
- †**89 Soluble MD-2 activity in plasma from patients with severe sepsis and septic shock**
Pugin J., Stern-Voeffray S., Daubeuf B., Elson G., Dunn-Siegrist I. (Geneva, Switzerland)
- 90 A region of MD-2 required for the antagonistic activity of lipid IVA**
Muroi M., Tanamoto K. (Tokyo, Japan)
- 91 TLR4 variant Asp299Gly induces hyporesponsiveness to LPS in human epithelial cells**
Shuto T., Tokuomi K., Kato K., Furuta T., Viriyakosol S., Okiyonedda T., Suico M.A., Kai H. (Kumamoto, Japan and San Diego, CA, USA)
- 92 The tetraspanins CD37 and CD81 are involved in LPS signaling**
Reiners J., Lentschat A., Orinska Z., Bulfone-Paus S., Ulmer A.J., Heine H. (Borstel, Germany)
- 93 Expression of Toll-like receptor 4 and tumor necrosis factor- α in rat macrophages**
Kitazawa T., Nakatani Y., Fujimoto M., Tamura N., Fukui H. (Nara, Japan)
- 94 Endotoxin-stimulated tumor necrosis factor- α production by various macrophages in rats with acute alcohol loading**
Kitazawa T., Nakatani Y., Fujimoto M., Tamura N., Fukui H. (Nara, Japan)
- 95 Effect of alcohol and serum on endotoxin-stimulated secretion of tumor necrosis factor (TNF)- α by macrophages**
Nakatani Y., Kitazawa T., Fujimoto M., Tamura N., Uemura M., Fukui H. (Nara, Japan)
- †**96 Synergistic transcriptional activation of inflammatory genes by NF- κ B and I κ B- ζ , a nuclear protein induced by LPS**
Matsuo S., Yamazaki S., Takeshige K., Muta T. (Fukuoka, Japan)
- †**97 Molecular dissection of I κ B- ζ , a transcriptional regulator induced by activation of innate immunity**
Motoyama M., Yamazaki S., Takeshige K., Muta T. (Fukuoka, Japan)
- 98 Differential regulation of human and murine iNOS expression in response to lipopolysaccharide**
Sugiyama K., Muroi M., Tanamoto K. (Tokyo, Japan)
- 99 The enhancing action of D-galactosamine on lipopolysaccharide-induced nitric oxide production in RAW 264.7 macrophage cells**
Morikawa A., Koide N., Mu M.M., Hassan M.F., Islam M.S., Ito H., Mori I., Yoshida T., Yokochi T. (Aichi, Japan)
- †**100 Inhibition of mitogen and stress-activated protein kinase 1/2 induces mitochondria-mediated apoptotic cell death in lipopolysaccharide-stimulated RAW 264.7 macrophage cells**
Mu M.M., Koide N., Hassan F., Islam S., Sugiyama T., Ito H., Mori I., Yoshida T., Yokochi T. (Aichi and Gifu, Japan)
- 101 LPS inhibits doxorubicin-induced apoptosis through its inhibition of p53 activation**
Hassan F., Islam S., Mu M.M., Ito H., Koide N., Mori I., Yoshida T., Yokochi T. (Aichi, Japan)
- 102 Modified pattern of proteins reflecting the anti-apoptotic activity of lipopolysaccharides in primary mouse B lymphocytes**
Souvannavong V., Saidji N., Chaby R. (Orsay, France)
- 103 MARCKS-LPS interaction in epithelial cells and its effect on actin filament depolymerization**
Mancek M., Japelj B., Majerle A., Andrae J., Brandenburg K., Triantafilou M., Triantafilou K., Jerala R. (Ljubljana, Slovenia, Borstel, Germany and Sussex, UK)
- 104 LPS-induced IL-18 in mouse peritoneal cells: the induced amount is very small but it plays an important role as a mediator**
Matsuura M., Saito S., Hirai Y. (Tochigi, Japan)
- 105 The role of lysophosphatidylcholine acyltransferase in leukocyte responses to lipopolysaccharide**
Jackson S.K., Parton J. (Cardiff, UK)

- 106 The effect of KDO on human spermatozoa**
Hakimi H., Geary I., Pacey A.A., Eley A. (Sheffield, UK)
- 107 Treponemal glycoconjugate inhibits LPS-induced cell activation by blocking LPS-binding protein and CD14 functions**
Asai Y., Hashimoto M., Ogawa T. (Gifu, Japan)
- 108 A novel endotoxin antagonist – *Helicobacter pylori* lipopolysaccharide attenuates endotoxicity**
Ho B., Ong L.H., Lui S.Y., Ding J.L. (Singapore)
- 109 Inhibition of cell activation: shedding new light on antagonism**
Müller M., Brandenburg K., Kusimoto S., Hawkins L., Seydel U., Schromm A.B. (Borstel, Germany, Osaka, Japan, and Andover, MA, USA)
- 110 Phage display method for isolating novel LPS-binding peptides**
Yamamoto A., Ochiai M., Horiuchi Y., Suzuki M.F., Matsumoto M., Takagi T., Niwa M. (Tokyo, Gunma, Miyagi and Osaka, Japan)
- 111 *Limulus* innate immune molecule for development of novel endotoxin diagnostics, endotoxin clearance and endotoxin antagonist**
Ding J.L., Ho B. (Singapore)
- 112 Efficacy of endotoxin-absorption therapy against septic shock**
Aatagi K., Tokuhira N., Ujiro A., Shimaoka H. (Osaka, Japan)
- 113 Research on the adsorption of endotoxin by new polymer lignophenol**
Ding Y., Cheng X. (Japan)
- 114 Enhancement of the bactericidal and LPS-neutralizing activities of guinea pig CAP11-derived antibacterial peptide by amino acid substitutions**
Okuda D., Yomogida S., Tamura H., Nagaoka I. (Tokyo, Japan)
- 115 Modulation of lipopolysaccharide-induced suppression of neutrophil apoptosis by antibacterial cathelicidin peptide CAP11**
Nagaoka I., Yomogida S., Tamura H., Hirata M. (Tokyo and Hokkaido, Japan)
- 116 Enhancement of endotoxin neutralization by coupling of C₁₂-alkyl chain to lactoferricin-derived peptide**
Andrú J., Lohner K., Blondelle S., Jerala R., Moriyon I., Koch M.H.J., Garidel P., Brandenburg K. (Borstel, Hamburg and Halle/Saale, Germany, Graz, Austria, San Diego, CA, USA and Pamplona, Spain)
- 117 Structure/function studies on endotoxin-neutralizing and antibacterial peptides derived from NK-lysin**
Andrú J., Bartels R., Moriyon I., Koch M.H.J., Brandenburg K. (Borstel and Hamburg, Germany and Pamplona, Spain)
- 118 Binding and neutralization of LPS/lipid A by arginosuccinate synthase, a rate-limiting enzyme in urea cycle and NO-citrulline cycle – analysis of its binding region**
Satoh M., Shinoda T., Yamazaki M. (Sagamiko, Japan)
- 119 Protein-bound polysaccharide isolated from basidiomycetes inhibits LPS-induced cell activation and prevents endotoxin shock**
Ogawa T., Asai Y., Takaori K., Yamamoto T. (Gifu and Osaka, Japan)
- 120 LPLUNC1 is a secreted product of airway epithelia with proposed innate immune functions**
Bartlett J.A., Wohlford-Lenane C., Jia H.P., Weiss J.P., McCray P.B. (Iowa City, IA, USA)
- 121 Novel effects of scavenger receptor ligands on bactericidal/permeability-increasing protein (BPI)-mediated delivery of purified endotoxin to human CD14⁺ monocytes**
Hume J., Zhang D.S., Teghanemt A., Gioannini T.L., Weiss J. (Iowa City, IA, USA)
- †**122 A complex of soluble TLR4 and MD-2 blocks LPS activity *in vitro***
Brandl K., Glück T., Salzberger B., Hartmann P., Falk W. (Regensburg, Germany)
- 123 C-reactive protein: an acute phase pathogen recognition receptor for bacterial clearance**
Ng P.M.L., Tan S.S.H., Ho B., Ding J.L. (Singapore)
- 124 The acute phase protein haptoglobin prevents hemoglobin-induced dispersion of LPS aggregates and suppresses the hemoglobin-mediated enhancement of cellular activation by LPS**
Alexander C., Buwitt-Beckmann U., Mach J-P., Gorczynski R.M., Brade L., Gronow S., Ulmer A.J., Wälli T., Zähringer U., Rietschel E.Th., Westphal O. (Borstel, Germany, Epalinges and Clarens-Montreux, Switzerland and Toronto, ONT, Canada)
- 125 An endotoxin:CD14 complex is the preferred substrate for acyloxyacylhydrolase**
Gioannini T.L., Teghanemt A., Zhang D.S., Weiss J.P. (Iowa City, IA, USA)
- 126 High density lipoprotein (HDL) suppresses the inhibitory activity of LPS binding protein (LBP)**
Thompson P.A., Kitchens R.L. (Dallas, TX, USA)

- 127 Involvement of lipid rafts in lipopolysaccharide-induced down-regulation of surface TLR4 expression in TLR4/MD-2/CD14-CHO cells**
Kato K., Shuto T., Mori Y., Viriyakosol S., Okiyoneda T., Arima H., Suico M.A., Kai H.
(Kumamoto, Japan and San Diego, CA, USA)
- 128 A general role of cAMP-elevating agents in suppression of pro-inflammatory responses to LPS in human whole blood and Kupffer cells**
Dahle M.K., Myhre A.E., Mathiesen Ø., Aasen A.O., Wang J.E. (Oslo, Norway)
- 129 Negative regulation of LPS-induced IL-12 p40 production in RAW264.7 cells by activation of GA-12 repressor element through overactivation of ERK1/2**
Saito S., Matsuura M., Hirai Y. (Tochigi, Japan)
- 130 MEK inhibition (PD98059) does not block LPS tolerance inhibition of macrophage ERK**
West M.A., Remenschneider A., Du N., Heagy W. (Evanston, IL, USA)
- 131 Liquid perfluorochemical attenuates inflammatory response in lipopolysaccharide-treated RAW 264.7 macrophages: involvement of inhibition of nuclear factor- κ B activation**
Chou T-C. (Taipei, Taiwan)
- 132 Peroxisome proliferator-activated receptor gamma: a counter-regulatory pathway for bacterial endotoxin and sepsis-induced inflammation**
Cook J., Zingarelli B. (Charleston, SC and Cincinnati, OH, USA)
- 133 Piceatannol prevents lipopolysaccharide (LPS)-induced nitric oxide (NO) production and nuclear factor (NF)- κ B activation through inhibiting I κ B kinase (IKK)**
Islam S., Hassan F., Mu M.M., Ito H., Koide N., Mori I., Yoshida T., Yokochi T. (Aichi, Japan)
- 134 The inhibitory action of activated protein C (APC) on LPS-induced nitric oxide (NO) production in RAW 264.7 macrophage cells**
Takahashi K., Morikawa A., Mu M.M., Hassan F., Islam S., Koide N., Ito H., Yokochi T. (Aichi, Japan)
- 135 Inhibition of LPS-induced nitric oxide and cytokine production in RAW 264 cells by 2-aminopurine**
Sugiyama T., Koide N., Mori H., Yokochi T. (Gifu and Aichi, Japan)
- 136 Inhibitory effects of antifungal agent amphotericin B on LPS-induced nitric oxide synthesis in mouse macrophages**
Kikuchi H. (Saitama, Japan)
- 137 Inhibition of LPS-induced macrophage activation by flavonoids luteolin and quercetin**
Kawaguchi K., Seki Y., Kaneko M., Takimoto H., Kumazawa Y. (Sagamihara, Japan)
- 138 Quercetin attenuates endotoxin-induced hepatotoxicity in rats: possible antioxidant mechanism**
Pilkhwil S., Khuad A., Tirkey N., Chopra K. (Chandigarh, India)
- 139 Quercetin attenuates endotoxin induced sickness behavior and oxidative stress in brain**
Pilkhwil S., Tirkey N., Khuad A., Chopra K. (Chandigarh, India)
- 140 Protective role of metallothionein in acute lung injury induced by bacterial endotoxin in mice**
Inoue K.-i., Takano H., Yoshikawa T., Yanagisawa R., Sato M., Shimada A., Sawada M., Nakamura K., Sanbongi C., Tohyama C. (Tsukuba, Japan)
- 141 Glutamine-induced heme oxygenase-1 protects against intestinal tissue injury in acute endotoxemia**
Takahashi T., Uehara K., Fujii H., Shimizu H., Ohmori E., Maeshima K., Inoue K., Kawakami T., Morita K.
(Okayama, Japan)
- 142 Effect of pioglitazone on endotoxin-induced decreases in hepatic drug-metabolizing enzyme activity and expression of CYP3A2 and CYP2C11**
Ueyama J., Kitaichi K., Nadai M., Iwase M., Miyoshi M., Kanazawa H., Suzuki R., Takagi K., Takagi K., Hasegawa T. (Nagoya, Aichi and Toyama, Japan)
- 143 Protective effects of combination of propofol and low-dose dexamethasone on conscious rats treated with endotoxin**
Tsao C.M., Ho S.T., Wu C.C. (Taipei, Taiwan)
- 144 Protective role of IL-6 in pulmonary hemorrhage induced by bacterial endotoxin**
Inoue K.-i., Takano H., Yanagisawa R., Sakurai M., Shimada A., Morita T., Sato M., Yoshino S., Yoshikawa T., Tohyama C. (Tsukuba, Japan)
- 145 Influence of fructose-1,6-diphosphate on endotoxin-induced lung injuries in sheep**
Markov A., Warren E., Sauls D., Cohly H., Skelton T. (Jackson, MS, USA)
- 146 The protective effect of protamine on murine endotoxin shock**
Wang S.R., Lin D.T., Tseng J., Chang Y.J., Kuo S.F. (Changhua and Taichung, Taiwan)
- 147 Effects of L-glutamine and L-asparagine on mouse survival with endotoxin shock**
Lin D.T., Wang S.R. (Changhua, Taiwan)

- 148 Macrophage activation by trehalose 6,6'-dimycolate (TDM) and related glycolipids via Toll-like receptor 2**
Takimoto H., Yano I., Kumazawa Y. (Sagamihara and Tokyo, Japan)
- 149 Binding specificity of Dectin-1 to 1,3- β -glucans and its role for cellular activation**
Adachi Y., Ishii T., Ikeda Y., Harada T., Tamura H., Aketagawa J., Tanaka S., Ohno N. (Tokyo, Japan)
- 150 Structure and innate immune response of lipoteichoic acids from *Listeria monocytogenes***
Stübs G., Morath S., Linddner B., Schumann R.R., Hartung T. (Berlin, Konstanz and Borstel, Germany)
- 151 Isolation and characterization of lipoteichoic acid from *Streptococcus pneumoniae***
Draing S., Morath S., Geyer A., Teti G., Hartung T., von Aulock S. (Konstanz and Marburg, Germany and Messina, Italy)
- 152 JNK is involved in the induction of COX-2 by lipoteichoic acid from *Staphylococcus aureus* in human pulmonary epithelial cells**
Chang H-C., Hung W-C. (Kaohsiung, Taiwan)
- 153 Comparison of cytokine-inducing active components in the LTA fraction obtained with 1-butanol extraction from *Enterococcus hirae* and *Staphylococcus aureus***
Suda Y., Kaseya R., Akimura M., Fukada Y., Aoyama K., Okuno T., Tamura T., Kirikae F., Eiraku N., Morioka H., Fujimoto Y., Fukase K., Kusumoto S., Hashimoto M. (Kagoshima, Hyogo, Tokyo and Osaka, Japan)
- 154 Toll-like receptor 2-dependent NF- κ B activation in response to *Porphyromonas gingivalis* FimA precursor lipoprotein**
Shoji M., Yoshimura A., Naito M., Yoshioka H., Hara Y., Golenbock D.T., Nakayama K. (Nagasaki, Japan and Worcester, MA, USA)
- 155 Lipopolysaccharide (LPS) binding protein (LBP) mediates innate immune responses by triacylated and diacylated lipopeptides**
Schröder N.W.J., Heine H., Alexander C., Manukyan M., Eckert J., Hamann L., Göbel U.B., Schumann R.R. (Berlin and Borstel, Germany and Los Angeles, CA, USA)
- 156 Structure-activity relationship of signaling by synthetic lipopeptides through TLR2/TLR6 and TLR2/TLR1 heterodimers**
Ulmer A.J., Buwitt-Beckmann U., Heine H., Jung G., Brock R., Akira S., Wiesmüller K.-H. (Borstel and Tübingen, Germany and Osaka, Japan)
- 157 Molecular interactions of lipopeptides with CD14 and TLR2**
Heine H., Manukyan M., Triantafilou K., Triantafilou M., Mackie A., Nilsen N., Espevik T., Wiesmüller K.-H., Ulmer A.J. (Borstel and Tübingen, Germany, Falmer and Norwich, UK and Trondheim, Norway)
- 158 Membrane-anchored CD14 is important for the induction of interleukin-8 by lipopolysaccharide and peptidoglycan in uro-epithelial cells**
Yokota S., Shimizu T., Tsukamoto T., Fujii N. (Sapporo, Japan)
- †**159 Double-stranded RNA-mediated TLR3 activation is enhanced by CD14**
Lee H-K., Duzendorfer S., Tobias P.S. (La Jolla, CA, USA)
- 160 PolyG-flanked palindromic CpG DNA activates STAT1 and NF- κ B through the p38 MAPK pathway to induce autocrine IFN- α / β -independent production of IFN- α , IP-10, and MIP-1 α in human plasmacytoid dendritic cells**
Osawa Y., Takauji R., Iho S., Kitagawa H., Takatsuka H., Matsuki T., Fujieda S., Yamamoto S. (Fukui and Tokyo, Japan)
- 161 In search of the TLR2 activity in peptidoglycan from *Staphylococcus aureus***
Inamura S., Woelk E., Heine H., Zähringer U. (Borstel, Germany)
- 162 Recognition of 6-O-acylated muramyl dipeptides carrying lipid A-type or branched-type fatty acid by murine macrophages**
Kumazawa Y., Ando K., Takimoto H. (Sagamihara, Japan)
- 163 Systematic functional analysis of NOD2 reveals regulatory mechanisms and critical residues involved in muramyl dipeptide recognition**
Chamaillard M., Tanabe T., Ogura Y., Zhu L., Qui S., Masumoto J., Ghosh P., Moran A., Predergast M., Tromp G., Williams C.J., Inohara N., Nunex G. (Ann Arbor, MI, USA)
- 164 Nod1 mediates p38 and p42/44 MAP kinase activation and IL-8 secretion induced by intracellular bacteria**
Opitz B., Püschel A., Förster S., Beermann W., Schmeck B., Chakraborty T., Suttorp N., Hippenstiel S. (Berlin and Giessen, Germany)
- 165 Up-regulation of PGRPs by chemically synthesized pathogen-associated molecular patterns in oral epithelial cells**
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