

## **Selection of publications of EMC coworkers and cooperation partners in the field of lipopeptides and TLR ligands**

1. K. Deres, H.-J. Schild, K.-H. Wiesmüller, G. Jung, and H.-G. Rammensee (1989) In vivo Priming of Virus Specific Cytotoxic T-Lymphocytes with Synthetic Lipopeptide Vaccine. *Nature* 342, 561-564.
2. K.-H. Wiesmüller, G. Jung, and G. Hess (1989) Novel Low-Molecular-Weight Synthetic Vaccine Against Foot-and-Mouth Disease Containing a Potent B-Cell and Macrophage Activator. *Vaccine* 7, 29-33.
3. F. Wiedemann, R. Link, K. Pumpe, U. Jakobshagen, H. E. Schäfer, K.-H. Wiesmüller, R.-P. Hummel, G. Jung, W. G. Bessler, and T. Böltz (1990) Histopathological Studies on the Local Reactions Induced by Complete Freund's Adjuvant (FCA), Bacterial Lipopolysaccharide (LPS) and Synthetic Lipopeptide (P3C) Conjugates. *J. Pathology* 164, 1-7.
4. K.-H. Wiesmüller, W. G. Bessler, and G. Jung (1992) Solid Phase Peptide Synthesis of Lipopeptide Vaccines Eliciting Epitope-Specific B-, T-Helper and T-Killer Cell Response. *Int. J. Pept. Prot. Res.* 40, 255-260.
5. R. Spohn, U. Buwitt-Beckmann, R. Brock, G. Jung, A. J. Ulmer, and K.-H. Wiesmüller (2004) Synthetic Lipopeptide Adjuvants and Toll-like Receptor 2 – Structure-Activity Relationships. *Vaccine* 23, 2494-2499.
6. U. Buwitt-Beckmann, H. Heine, K.-H. Wiesmüller, G. Jung, R. Brock, S. Akira, and A. J. Ulmer (2005) Toll-Like Receptor 6-Independent Signaling by Diacylated Lipopeptides. *Eur J Immunol.* 35, 282-289.
7. F. Reutter, G. Jung, W. Baier, B. Treyer, W.G. Bessler, K.-H. Wiesmüller (2005) Immunostimulants and Toll-like receptor ligands obtained by screening combinatorial lipopeptide collections. *J. Pept. Res.* 65, 375-383.
8. U. Buwitt-Beckmann, H. Heine, K.-H. Wiesmüller, G. Jung, R. Brock, S. Akira, and A. Ulmer (2006) TLR1- and TLR6-Independent Recognition of Bacterial Lipopeptides. *J. Biol. Chem.* 281, 9049-9057.
9. A. B. Schromm, J. Howe, A. J. Ulmer, K.-H. Wiesmüller, T. Seyberth, G. Jung, M. Rossle, M. H. J. Koch, T. Gutschmann, and K. Brandenburg (2007) Physicochemical and Biological Analysis of Synthetic Bacterial Lipopeptides: Validity of the Concept of 'Endotoxic Conformation'. *J. Biol Chem.* 282, 11030-11037.
10. S. Voss, A. J. Ulmer, G. Jung, K.-H. Wiesmüller, and R. Brock (2007) The Activity of Lipopeptide TLR2 Agonists Critically Depends on the Presence of Solubilizers. *Eur. J. Immunol.*, 37, 3489-3498.
11. Burger-Kentischer, I.S. Abele, D. Finkelmeier, K.-H. Wiesmüller, S. Rupp (2010) A new cell-based innate immune receptor assay for the examination of receptor activity, ligand specificity, signalling pathways and the detection of pyrogens. *J. Immunol. Methods.* 358, 93-103.
12. D. T. Nguyen, L. de Witte, M. Ludlow, S. Yüksel, K.-H. Wiesmüller, T.B.H. Geijtenbeek, A.D.M.E. Osterhaus, R. L. de Swart (2010) The Synthetic Bacterial Lipopeptide Pam<sub>3</sub>CSK<sub>4</sub> Modulates Respiratory Syncytial Virus Infection Independent of TLR Activation. *PLoS Pathog* 6(8): e1001049. doi:10.1371/journal.ppat.1001049.
13. R. B. Baleeiro, K.-H. Wiesmüller, Y. Reiter, B. Baude, L. Dähne, A. Patzelt, J. Lademann, J.A. Barbuto, P. Walden (2013) Topical Vaccination with Functionalized Particles Targeting Dendritic Cells. *J. Invest. Dermatol.* 20. doi: 10.1038/jid.2013.79.
14. M. Stiehm, K. Peters, K.-H. Wiesmüller, A. Bufe, M. Peters (2013) A novel synthetic lipopeptide is allergy-protective by the induction of LPS-tolerance. *Clinical & Experimental Allergy* 43, 785–797. doi:10.1111/cea.12116.
15. G. M. de Tejada, L. Heinbockel, R. Ferrer-Espada, H. Heine, C. Alexander, S. Bárcena-Varela, T. Goldmann, W. Correa, K.-H. Wiesmüller, N. Gisch, S. Sánchez-Gómez, S. Fukuoaka, T. Schürholz, T. Gutschmann, K. Brandenburg (2015) Lipoproteins/peptides are sepsis-inducing toxins from bacteria that can be neutralized by synthetic anti-endotoxin peptides. *Sci Rep.* 22;5:14292. doi: 10.1038/srep14292.
16. H.-G. Rammensee, K.-H. Wiesmüller, P. A. Chandran et al. (2019) A new synthetic toll-like receptor 1/2 ligand is an efficient adjuvant for peptide vaccination in a human volunteer. *J. immunotherapy cancer* 7, 307 doi:10.1186/s40425-019-0796-5.

17. H.-G. Rammensee, C. Gouttefangeas, C. Heidt et al. (2021) Designing a SARS-CoV-2 T-cell-Inducing vaccine for high-risk patient groups. *Vaccines* 9, 428. <https://doi.org/10.3390/vaccines9050428>.
18. J. Hansen, K. Kolbe, I.R. König, R. Scherließ, M. Hellfritzsch, S. Malm, S. Müller-Loennies, J. Zallet, D. Hillmann, K.-H. Wiesmüller, C. Herzmann, J. Brandenburg, N. Reiling (2022) Lipobiotin-capture magnetic bead assay for isolation, enrichment and detection of *Mycobacterium tuberculosis* from saliva. *PLoS One*. Jul 15;17(7):e0265554. <https://doi.org/10.1371/journal.pone.0265554>.