



Lantibiotics are small antimicrobial peptides with high potency against human pathogenic Gram-positive bacteria. Within these specific protein defence systems are expressed. One example is the nisin resistance system of *S. agalactiae*. Here, the proteins NSR and NsrFP will be characterized in vivo and in vitro. Further in vivo expression of the lantibiotic resistance system in the host organism, in collaboration with AG Pfeffer (project 2d), will be investigated and the structure of the loop of NsrFP will be determined.

The major aim will be to identify high affinity binding inhibitor, which acts specifically against these proteins, by screening compounds provided by AG Gohlke.

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