

Sebastian Springer
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Tuesday, 27 June 2017, meeting room 2, building 101, at 10.00

Peptide exchange and super-stable MHC class I molecules

Abstract:

MHC class I molecules bind peptides to present them to T cells, and the peptide ligand is required to keep the class I molecule conformationally stable. Our lab is interested in how peptides bind to and dissociate from class I molecules, and how antigen-presenting cells detect such peptide binding and dissociation processes in their class I molecules. We have found that the F pocket region of class I is especially important for their conformational stability, and we have designed both small molecules and mutations in order to stabilize this region. The small molecules - for example dipeptides - have interesting properties in promoting peptide exchange, and the mutations still bind peptide but are also stable in an empty state. I'll discuss some applications in basic science and in immunobiotechnology.

We are very happy to invite you to this presentation by Professor Springer.

Yours sincerely,
Sine Reker Hadrup
Associate Professor, Immunology and Vaccinology
DTU VET