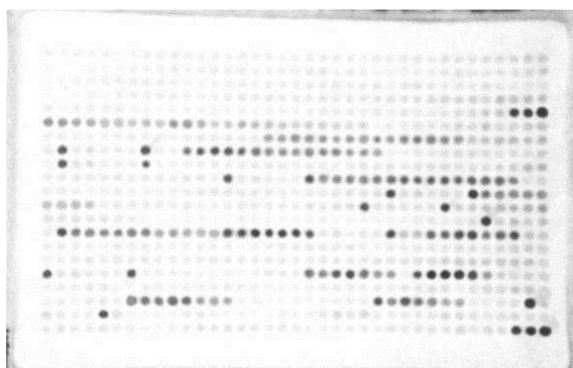
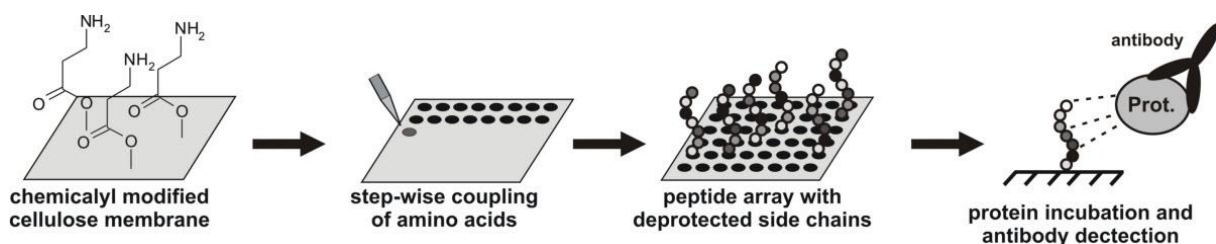


Dear Colleagues,

As of now on, our protein chemistry facility offers SPOT synthesis of peptides.

**What is SPOT synthesis?**

The principle of the technique is to dispense small droplets of pre-activated amino acid derivatives onto a predefined array of positions on a porous membrane. The droplets get absorbed and form individual reaction compartments for chemical reaction in solid phase synthesis. The most popular support is made from derivatized cellulose filter paper.



**SPOT membrane**

Size: 10 x 15 cm

Spots per membrane: 1x 600

Spot diameter: 2-3 mm

Spots/cm<sup>2</sup>: 5

**For which Applications can SPOT synthesized peptides be used?**

- Epitope mapping
- Alanine walk
- Binding assay
- Kinase assay
- ...

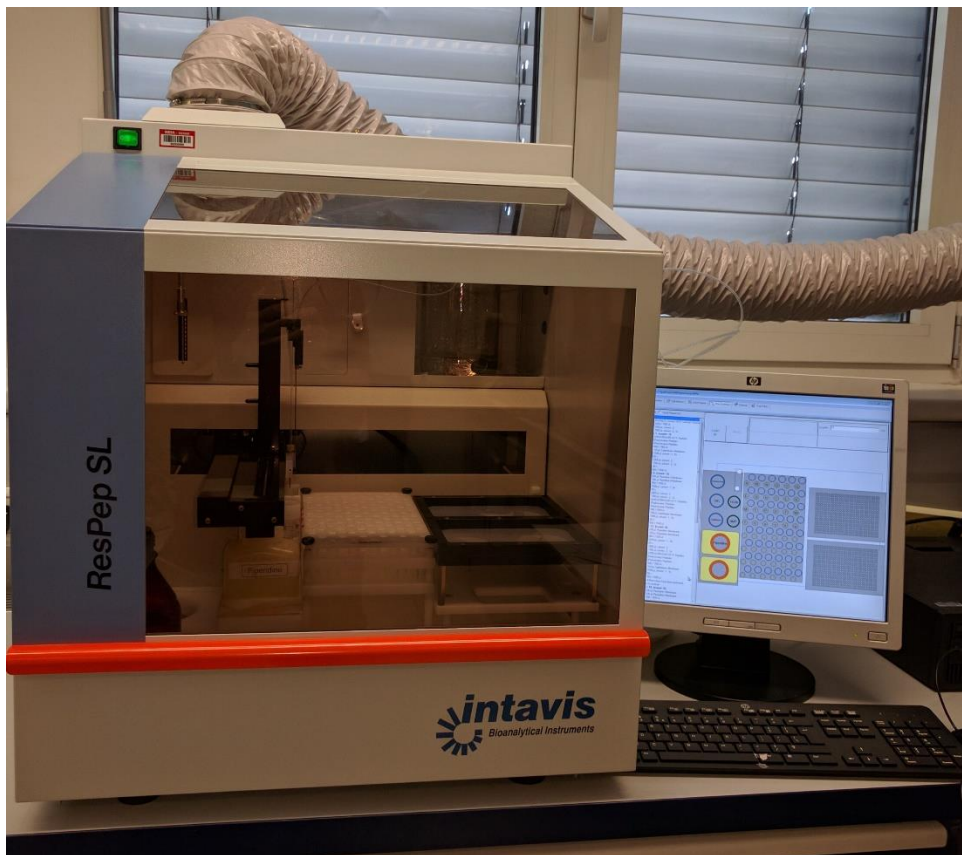
**How many peptides can be spotted on one membrane?**

Up to 600 individual peptides can be synthesized on one Cellulose membrane. (appr 20nmol per spot). It is not possible to use free positions on a membrane in a later synthesis process. The price for one membrane is approximately 150 Euro, therefore we recommend to use if possible all 600 positions.

***Peptides of which length and purity can be spotted?***

SPOT synthesis is at its best at peptide lengths between 6 and 15 residues (purity ~80%). Beyond that length the quality drops slowly as not all peptide chains are fully accessible any more. We offer synthesis of peptides with a maximum length of 25 amino acids.

For further information please contact Mathias Madalinski ([madalinski@imp.ac.at](mailto:madalinski@imp.ac.at)).



*Picture of our new SPOT synthesizer ResPep SL from Intavis Bioanalytical Instruments which is located in room 2.46 at the IMP.*