Tryptic cleavage in the gel with different proteases

(Trypsin, Arg-C, Asp-N, Lys-C, Glu-C)

To wash

- Discard the liquid
- > 10min 60μL 50% ACN / 100mM TEAB
- > 10min 60μL ACN
- > 10min 60μL 100mM TEAB
- > 10min 60μL ACN
- > 10min 60μL 100mM TEAB
- > 10min 60μL ACN

The liquid is discarded after each step.

Reduction and alkylation

- \triangleright 60µL 10mM DTT (in 100mM TEAB) \rightarrow 57 °C, 30min
- ➤ 10min 60µL ACN
- \triangleright 60µL 10 mM IAA (in 100mM TEAB) \rightarrow 25 °C, 20min, dark
- > 10min 60μL ACN
- > 10min 60μL 100mM TEAB
- > 10min 60μL ACN
- > 10min 60μL ACN

The liquid is discarded after each step.

<u>Cleavage</u>

- Add 200ng of the appropriate enzyme in 40μl 25mM TEAB. Use different buffer for Arg-C: 100mM Tris-HCl pH 8, 10mM CaCl₂, 5mM DTT, 0,5mM EDTA
- > Incubate on ice for 1h
- ➤ Incubate with Trypsin, Arg-C, Asp-N and Lys-C at 37°C, with Glu-C at room temperature (temperature should not exceed 25°C) over night
- Collect now liquid after each step
- > Add 20μl 0,1% TFA
- > 30min 30μl 0,1%TFA/ACN
- > 20min 20μl ACN
- > 20min 30μl 100mM TEAB for Samples digested with Arg-C 100mM Tris-HCl pH8
- > 20min 20μl ACN
- 20min 20μl ACN: Put Samples in SpeedVac to dry.