

Sample prep for Protein and peptide **standards** from Bruker for calibration

Solvent = 1:1 water and acetonitrile in 0.1%TFA

Smaller protein (4, 000 -20,000 Da) – use Protein Standard I (part # 206 355 – 5 vials)

Larger protein (over 20,000 Da) – use Protein Standard II (part # 207 234 – 5 vials)

Peptide mapping and smaller molecules – use Peptide mix (part # 206 195 – 5 vials)

Matrix Prep (for protein and peptides)

Alpha cyano-4-hydroxycinnamic acid (good for <10,000 Da) –(part # 201 344 – 5x 200 mg)

Sinapinic Acid (good for >10,000)- (part # 201 345 – 5x 200 mg)

10 mg/1ml in Solvent

1 vial of Bruker reconstituted standard dissolved in 125 µl of solvent (store in 4°C for future use)

Take 1 µl of standard calibration solution mix with 10 µl of Matrix solution. Transfer the mixtures onto a sample spot on a 96 plate (Dry before loading into the instrument)

Sample prep for **Protein or peptide** samples

Solvent = 1:1 water and acetonitrile in 0.1%TFA

Protein = 1-10 pmole/µl in solvent

Peptide = 1 pmole/µl in solvent

Final sample mixture

1 µl of sample mix with 10 µl of matrix

Sample prep for **non-water soluble organic and aromatic polymer** samples

Matrix prep

2,5-dihydroxynrzoic acid (2,-5-DHB) (part # 201 346)

20-50 mg in 1 ml of MeOH, acetone (or other suitable solvents) in glass vial

Dithranol (from Sigma)

10 mg in 1 ml of THF or methyl chloride

Final sample mixture

1 µl of sample mix with 10 µl of matrix

Part # for Sample 96 spots Plate (MSP ground Steel)- 280 799 (around \$400 a piece)

Recycle used sample plates – Sonicate in MeOH/water (1:1) for 15 minutes, then rinsed in MeOH. Dry with clean nitrogen or air.