Sample prep for Protein and peptide \textbf{standards} from Bruker for \textbf{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)

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Sample prep for \textbf{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

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Sample prep for \textbf{non-water soluble organic and aromatic polymer} samples

Matrix prep

2,5-dihydroxynrnozoic acid (2,-5-DHB) (part # 201 346)
20-50 mg in 1 ml or 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

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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.