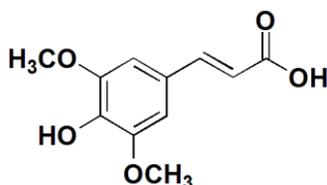


Sinapinic Acid Protocol and Product Information Sheet

Product Category:	Ultrapure MALDI Matrices
Catalog Number(s):	p9102-25mg , p9102-5x10mg , p9102-4x25mg , p9102-1gm
Product Name:	Sinapinic Acid
Alternative Name(s):	Sinapic Acid; SA Matrix; 3,5-Dimethoxy-4-hydroxycinnamic acid
CAS Number:	530-59-6
Chemical Formula:	C ₁₁ H ₁₂ O ₅
Molecular Weight:	224.21
Wavelength:	337 nm, 353 nm



There are many preparations and a wide variety of techniques where Sinapinic acid and other MALDI matrices are used. Below is intended to be only a general protocol or a starting point.

MALDI Matrix Preparation (10mg/mL Stock)

Dissolve 10mg of matrix in 1.0 mL of 50% acetonitrile, 50% proteomics grade water and 0.1% TFA. Vortex vigorously. (Other solvents may be used, such as ones containing higher acetonitrile concentrations, such as 70%; lower concentration of TFA, such as 0.01%; or replacing acetonitrile with methanol, etc.).

Sample Spotting (use one of the two methods below):

Dried Droplet Method

1. Mix the matrix stock solution with sample.
2. Apply 0.2 to 0.6 μ L of this solution onto the MALDI sample plate.
3. Allow the matrix:sample to co-crystallize through evaporation at room temperature.
4. Place MALDI plate in MALDI-MS Ion Source and analyze.

Thin Layer Method (Matrix spotting should be done in organic solvent for fast evaporation)

1. Prespot MALDI-MS sample plate with 0.5-1.0 μ L of MALDI matrix stock solution.
2. Allow this spot to evaporate to dryness.
3. Dispense 0.2 to 0.6 μ L of protein sample solution (in acetonitrile / water cosolvent).
4. Allow matrix:sample crystals to form through solvent evaporation.
5. Place MALDI plate in MALDI-MS ion source and analyze.

Note: Spotting additional matrix stock solution on top of sample (sandwich method) can also be used.