

THAP Protocol and Product Information Sheet

Product Category: UltraPure MALDI Matrices
Catalog Number(s): p9104-25mg, p9104-4x25mg

Product Name: THAP

Alternative Name(s): 2',4',6'-Trihydroxyacetophenone monohydrate

CAS Number: 480-66-0 Chemical Formula: $C_8H_8O_4$ Molecular Weight: 186.16

Typical Working Solution: 50:50:0.1 Water:Acetonitrile:TFA

Since there are many preparations and a wide variety of techniques where THAP and other MALDI matrices are used, below is intended to be only a general protocol or a starting point, not necessarily the best for your particular application.

THAP MALDI Matrix Preparation

- 1. Dissolve the contents of the tube in 1.0 mL of 50% acetonitrile, 50% proteomics grade water and 0.1% TFA (25 mg/mL). 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.).
- 2. If the entire contents of the tube is not soluble in your solution of choice, spin the tube down in a microcentrifuge, then transfer the supernatant to an new microfuge tube. This solution contains the saturated MALDI matrix.

Dried Droplet Method

- 1. Mix the 25 mg/mL matrix solution (or other matrix concentrated solution) with your sample.
- 2. Apply 0.2 to 1.0 µL 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 samples.

Thin Layer Method is also a good option, although this is not covered in this product sheet.