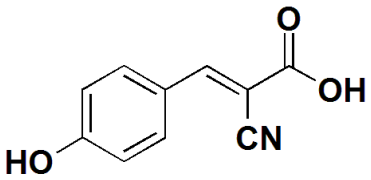
ProteoChem
Crosslinking Protein Biology & Chemistry

CHCA Protocol and Product Information Sheet

Product Category:	UltraPure MALDI Matrices
Catalog Number(s):	p9100-25mg, p9100-5x10mg, p9100-4x25mg, p9100-1gm
Product Name:	CHCA
Alternative Name(s):	α-Cyano-4-hydroxycinnamic acid; CHCA matrix
CAS Number:	28166-41-8
Chemical Formula:	$C_{10}H_7O_3N$
Molecular Weight:	189.17
Wavelength(s):	337 nm, 355 nm



Since there are many preparations and a wide variety of techniques where α-Cyano-4-hydroxycinnamic acid 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.

MALDI Matrix Preparation (Saturated Method) – NOT FULLY DISSOLVED

1. Dissolve the contents of the tube 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.).
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.

   Note: A 5 mg/mL solution or lower in the above solvents can also be employed. A slightly higher concentration will be achieved by first dissolving in Acetonitrile alone, then adding aqueous 0.1% TFA.

Dried Droplet Method

1. Mix the saturated 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.

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

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