

# Extraction of methylmalonic acid from biological fluids using Strata™ SAX

Reference: "Optimization and performance of a rapid gas chromatography-mass spectrometry analysis for methylmalonic acid determination in serum and plasma" *J. Chromatogr. B*, **2000**, 741, 231-241.

Authors: M. Kushnir and G. Komaromy-Hillary

Recommended SPE sorbent: Strata SAX

## SPE method:

**Condition:** 3mL methanol

**Equilibrate:** 5mL water

**Load:** sample

**Wash 1:** 10mL water; dry sorbent under vacuum for 3 min

**Wash 2:** 5mL methanol; dry sorbent under vacuum for 3 min

**Wash 3:** 2mL MTBE; dry sorbent under vacuum for 3 min

**Elution:** 5mL 3% formic acid in MTBE

Note: the solvent volumes are recommended for 200mg of bed mass. Please adjust the volumes accordingly to optimize the method for smaller or larger sorbent bed mass.

## Analysis:

The eluate was dried under a stream of nitrogen at 35°C. The sample was reconstituted with 25µL MSTFA + 1%TMCS and 25µL acetonitrile. The sample was heated for 5 min at 55°C. Final analysis was performed by GC/MS.

## Order Information

Order Number	Description
8B-S008-EAK	Strata SAX tubes 100mg/1mL
8B-S008-EBJ	Strata SAX tubes 100mg/3mL
8B-S008-FBJ	Strata SAX tubes 200mg/3mL
8B-S008-HBJ	Strata SAX tubes 500mg/3mL
8B-S008-HCH	Strata SAX tubes 500mg/6mL
8B-S008-JCH	Strata SAX tubes 1g/6mL
8E-S008-CGB	Strata SAX 96-Well Plate 25mg/well
8E-S008-DGB	Strata SAX 96-Well Plate 50mg/well
8E-S008-EGB	Strata SAX 96-Well Plate 100mg/well

This method is designed as a convenient starting point for further investigation. Phenomenex makes no guarantee regarding the accuracy or completeness of the method.