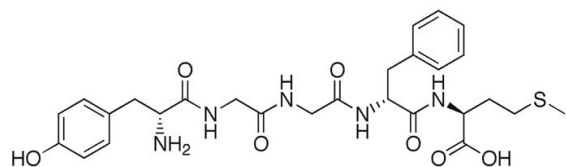
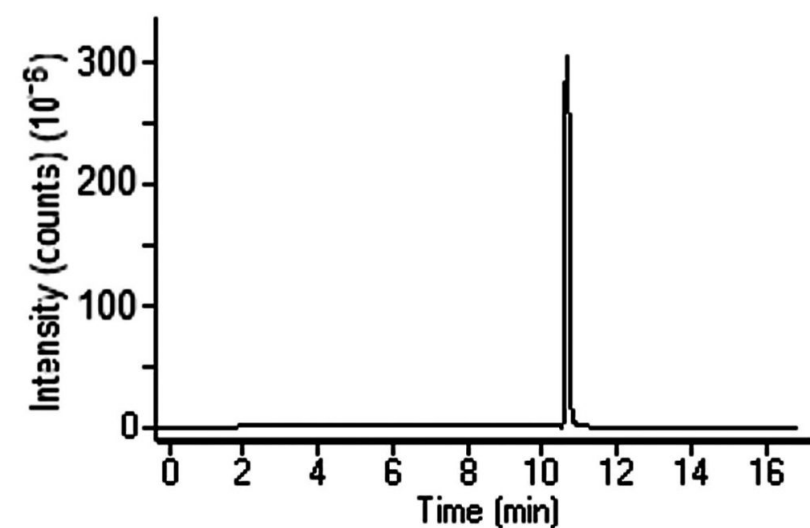


## Methionine-Enkephalin Analyzed with LCMS – AppNote

### Selective Method for an Opiate like Peptide

In this AppNote, the developed Method was used to analyze Methionine-Enkephalin (*MEK*), the resulting Peak shape was Symmetrical. and the Retention time was more than adequate. In addition to the intact peptide, the Gradient method was also designed to analyze its metabolites and enzyme inhibitors.

This Gradient Method with MS detection is Selective for MEK Determination with detection limits in the Pico mole range.



#### Peak:

Met-Enkephalin: Tyr-Gly-Gly-Phe-Met, 574.66 m/z

### Method Conditions

**Column:** Cogent Diamond Hydride™, 4μm, 100Å

**Catalog No.:** 70000-15P-2

**Dimensions:** 2.1 x 150mm

**Mobile Phase:**

A: DI Water with 0.1% Formic Acid (v/v)

B: Acetonitrile with 0.1% Formic Acid (v/v)

**Gradient:**

Time (minutes)	%B
0	90
5	90
10	90

20	60
20.1	30
30	30
30.1	90

**Post Time:** 3 minutes

**Injection vol.:** 2 $\mu$ L

**Flow rate:** 0.4mL / minute

**Detection:** LC-ESI/MS was performed using a Thermo Finnigan SpectraSystem HPLC

**t<sub>0</sub>:** 0.9 minutes

**Note:** MEK is a naturally occurring opiate-like Peptide which could be used as an analgesic agent. In recent years, there has been growing interest in using Peptides as therapeutic drugs. Excellent analytical methods are needed in pharmacokinetic studies of these new drugs, since samples need to be analyzed in a biological matrix and the concentration of the compounds is low.



## Attachment

**No 235 Methionine-Enkephalin Analyzed with LCMS pdf** 0.2 Mb [Download File](#)

Printed from the Chrom Resource Center

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)

Date: 05-18-2024