

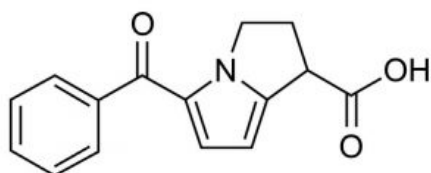
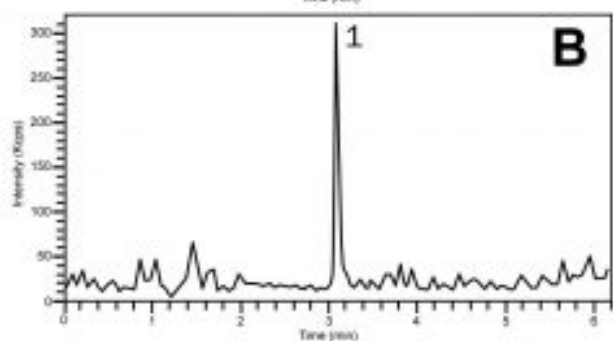
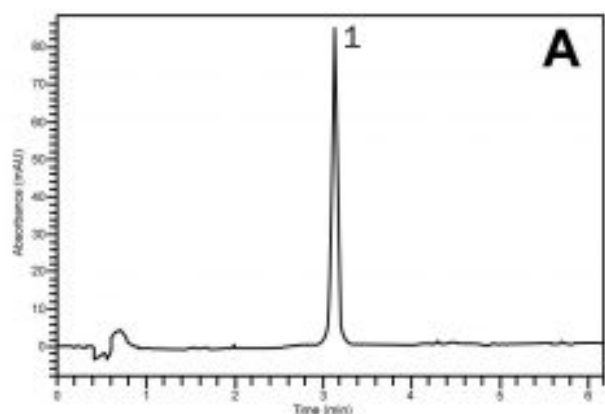
## Ketorolac Separation with LCMS – AppNote

### Analgesic Agent Analyzed in Tablet Form

Click [HERE](#) for Column Ordering Information.

There is a need for analysis of the Active Pharmaceutical Ingredient (API) in Ketorolac Tablet formulations in order to evaluate two different extraction protocols. The use of Ethanol as the extraction solvent was explored initially but DI Water was observed to produce superior extraction efficiency.

The chromatograms show how the compound can be retained and detected using either UV-based detection (Fig. A) or Mass Spectrometry (Fig. B). The conditions may be applied to the routine assay analyses of Ketorolac Tablet formulations.



#### Peak:

Ketorolac 256.2 m/z [M+H]<sup>+</sup>

### Method Conditions

**Column:** Cogent Phenyl Hydride™, 4μm, 1 00Å

**Catalog No.:** 69020-10P-2

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**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)

**Dimensions:** 2.1 x 100 mm

**Solvents:**

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

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

**Gradient:**

| Time ( <i>minutes</i> ) | %B |
|-------------------------|----|
| 0                       | 20 |
| 5                       | 80 |
| 10                      | 80 |
| 11                      | 20 |

**Injection vol.:** 1µL

**Flow rate:** 0.5 mL/minute

**Detection:**

Fig. A: UV 320 nm

Fig. B: ESI-POS- Mass Spec

**Sample:** Ground Ketorolac Tablet was extracted with DI Water (1 mg/mL powder concentration) and gravity filtered. Sample was then filtered through a 0.45µm Syringe filter for HPLC analysis.



**Attachment**

**No 362 Ketorolac by HPLC and LCMS pdf** 0.2 Mb [Download File](#)

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