

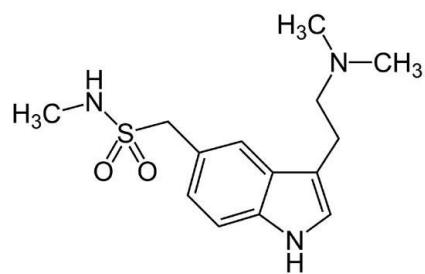
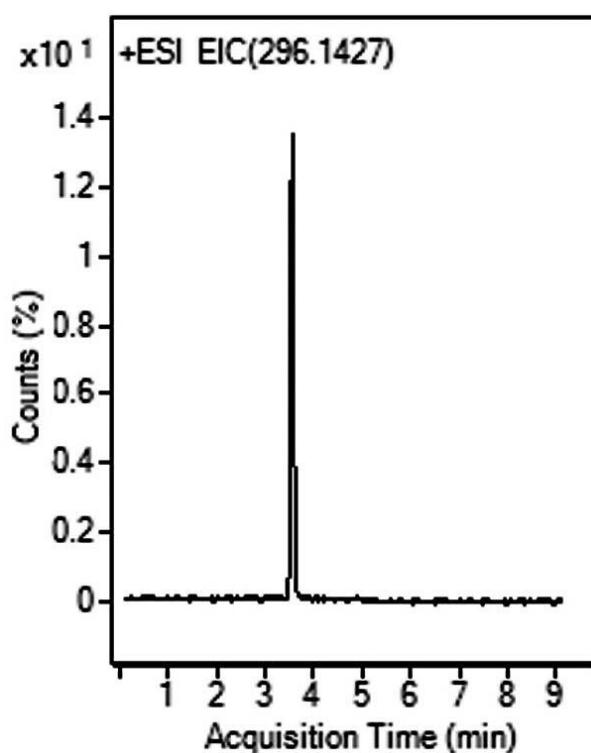


## Sumatriptan as an API Analyzed with LCMS - AppNote

### Analysis of Imitrex® API from Tablet Formulations

This AppNote Method for Analysis of a challenging compound (Sumatriptan) has several advantages over other Methods. This Analysis can be performed using a higher concentration of organic solvent, which is much more suitable for electrospray MS Detection.

This AppNote provides robust and repeatable (*%RSD 0.1 and lower*) results.



#### Peak:

Sumatriptan 296.1427 m/z [M+NH3]+

### Method Conditions

**Column:** Cogent Diamond Hydride 2.0™, 2.2μm, 120Å

**Catalog No.:** [70200-05P-2](#)

**Dimensions:** 2.1 x 50mm

**Mobile Phase:**

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

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

**Gradient:**

Time (minutes)	%B
0	90
4	30
6	30
7	90

**Post time:** 3 minutes

**Injection vol.:** 1 $\mu$ L

**Flow rate:** 0.4mL / minute

**Detection:** ESI – POS - Agilent 6210 MSD TOF Mass Spectrometer

**Sample Preparation:** Six 25mg strength tablets of Imitrex® were crushed and a portion containing 40mg of the API was weighed out. The powder was suspended in an Solvent A / Solvent B (1:1) Mixture, vortexed, and filtered through a 0.45 $\mu$ m Syringe Filter (MICROSOLV Tech Corp.). A Sample for injection was diluted to final concentration of 0.0005  $\mu$ g / mL.

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

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**Note:** Migraine is a common disorder, with symptoms of unilateral headache accompanied by nausea and / or vomiting. Sumatriptan is an anti-migraine drug sold under the trade name Imitrex®. It belongs to a class of drugs called Selective Serotonin Receptor Agonists.

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**Attachment No 265 Sumatriptan as an API Analyzed with LCMS pdf 0.2 Mb** [Download File](#)

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