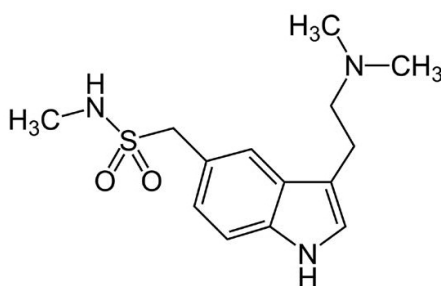
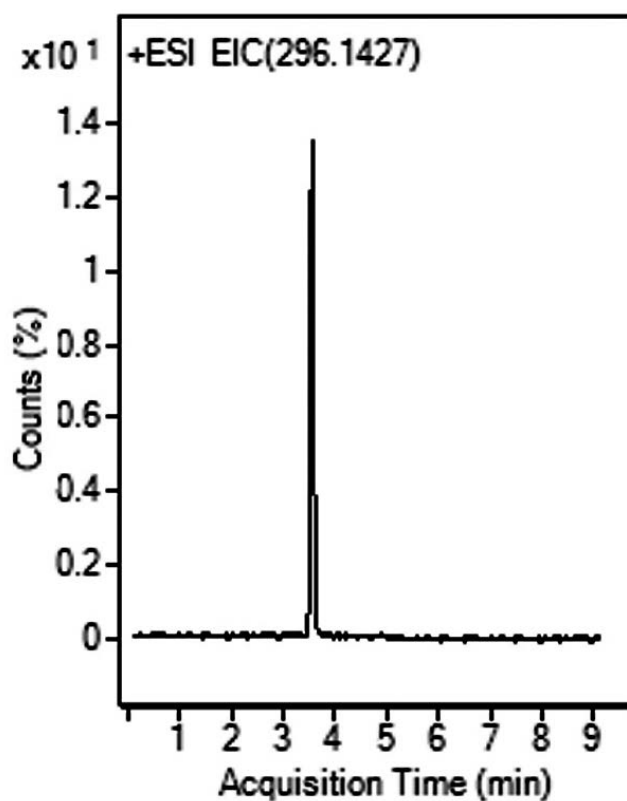


Sumatriptan as an API Analyzed with LCMS – AppNote

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 $[\text{M}+\text{NH}_3]^+$

Method Conditions

Column: Cogent Diamond Hydride 2.0™, 2.2 μm , 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.: 1µL

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 0.45µm Syringe Filter (MicroSolv Tech Corp.). A Sample for injection was diluted to final concentration of 0.0005 µg / mL.

t₀: 0.9 minutes

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.



Attachment

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

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