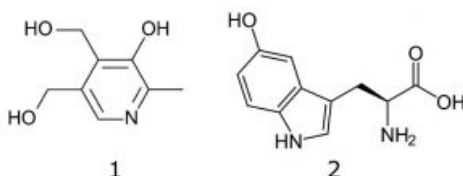
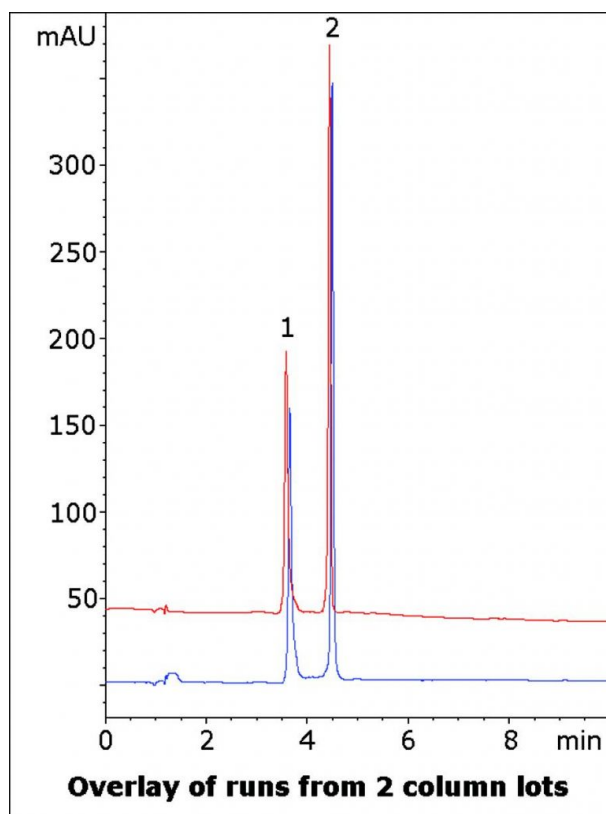


## Hydroxytryptophan (5-HTP) Analyzed by HPLC- AppNote

### Separation from Vitamin B6

Pyridoxine (Vitamin B6) is often added to formulations of 5-Hydroxytryptophan (5-HTP), as it assists in the conversion of 5-HTP to Serotonin. Therefore, it is of interest to separate these two compounds for an HPLC assay Method of this combination formulation.

The Method shown provides good resolution between the two peaks and both are well retained to allow for separation from matrix components that may be present. Runs from two Column lots are shown in the figure to illustrate lot-to-lot consistency. The Mobile Phase conditions are LCMS compatible as well, which expands the versatility of the Method.



#### Peaks:

1. Pyridoxine
2. 5-Hydroxytryptophan

### Method Conditions

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

Printed from the Chrom Resource Center  
Copyright 2024, All Rights Apply  
**MicroSolv Technology Corporation**  
9158 Industrial Blvd. NE, Leland, NC 28451  
tel. (732) 380-8900, fax (910) 769-9435  
Email: customers@mtc-usa.com  
Website: www.mtc-usa.com

**Catalog No.:** 70000-7.5P

**Dimensions:** 4.6 x 75mm

**Mobile Phase:**

A: DI Water / 10mM Ammonium Acetate

B: 95% Acetonitrile / 5% Solvent A (v/v)

Time (minutes)	%B
0	100
1	100
6	50
7	100

**Post Time:** 3 minutes

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

**Flow rate:** 1.0mL / minute

**Detection:** UV @ 225nm

**Sample Preparation:** 0.1mg / mL 5-Hydroxytryptophan and 0.3mg / mL Pyridoxine USP reference standards in a diluent of 50:50 Solvent A / Solvent B. Peak identities were confirmed with individual standards.

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

**Note:** 5-Hydroxytryptophan is a metabolic precursor to Serotonin. Since its use increases Serotonin production, it has a variety of applications involving inadequate Serotonin, including as an antidepressant, appetite suppressant, and sleep aid. It is available as an Over-The-Counter dietary supplement.



**Attachment**

**No 212 Hydroxytryptophan Analyzed by HPLC pdf** 0.4 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2024, All Rights Apply

**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)