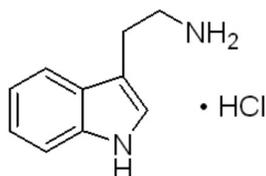
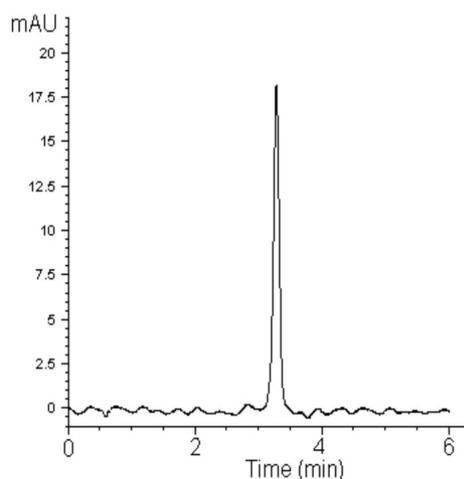


# Tryptamine-Biogenic Amine

Analysis that is Easy, Fast and Precise



Tryptamine hydrochloride



## Method Conditions

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

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

**Dimensions:** 4.6 x 75 mm

**Solvents:** A: DI H<sub>2</sub>O/ 0.1% formic acid/ 0.001% TFA  
B: Acetonitrile/ 0.1% formic acid/ 0.001% TFA

**Mobile Phase:** 85% B/ 15% A

**Flow rate:** 1.0 mL/min

**Detection:** UV 223 nm

**Sample:** Tryptamine hydrochloride 0.1 mg/mL

**t<sub>0</sub>:** 0.892 min

## Discussion

Cogent Diamond Hydride columns offer extremely simple and fast analyses of this and other important biogenic amines. Using this method to analyze these compounds produces excellent peak shape and reproducible retention times as shown. Tryptamine is very polar and impossible to retain when using standard C18 columns.

The baseline in this chromatogram appears to be noisy but it is due to the low wavelength (223 nm) used along with the presence of formic acid and TFA in the mobile phase. The conditions of analysis were originally developed for LCMS where the additives do not disturb the baseline but enhance ionization of the sample.

**Notes:** New trends in the food industry are directed to healthier products and trace compounds can affect the food quality. Biogenic amines are of special interest since in this area as they are usually present in fermented and spoiled foods and may cause several health problems in sensitive humans, particularly babies. In addition to analyzing tryptamine in food products the excretion level of this biogenic amine in schizophrenic patients is highly relevant, so it has to be measured with a high confidence in the results.