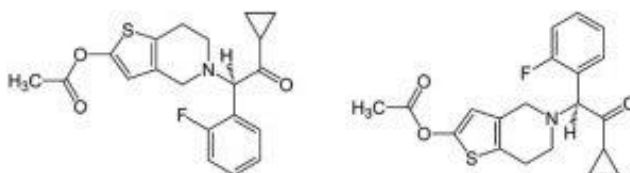
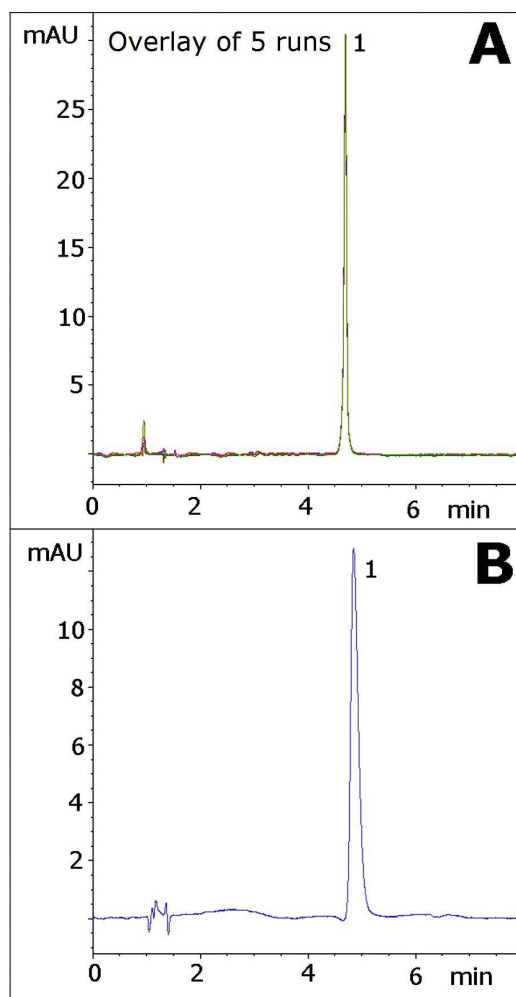


## Prasugrel Analyzed with HPLC - AppNote

### Comparison of Diamond Hydride to C18 HPLC Column

Prasugrel has a tertiary Amine and therefore tails in many Reversed Phase methods and conventional HPLC columns. Figure A shows how a sharp and symmetrical peak can be easily obtained with the Cogent Diamond Hydride Column using an MS-compatible Mobile Phase.

Figure B shows the peak that was obtained using a Reversed Phase gradient (30–60%B over 5 minutes) using the same Mobile Phase solvents and a Type B silica based C18 Column. Here the effects of residual silanols on the Type B silica based column lead to peak tailing.



**Peak:**  
Prasugrel

**Method Conditions**

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

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

**Dimensions:** 4.6 x 75mm

**Mobile Phase:**

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

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

**Gradient:**

Time (Minutes)	%B
0	97
1	97
5	60
6	97

**Post Time:** 2 minutes

**Flow rate:** 1.0 mL/minute

**Detection:** 254 nm

**Injection vol.:** 1µL

**Sample Preparation:** 0.1 mg/mL Prasugrel in Methanol diluent

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

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**Note:** Prasugrel is a platelet inhibitor which was approved by the US Food and Drug Administration in 2009 for the reduction of thrombotic cardiovascular events. It is marketed as Effient®.

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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)