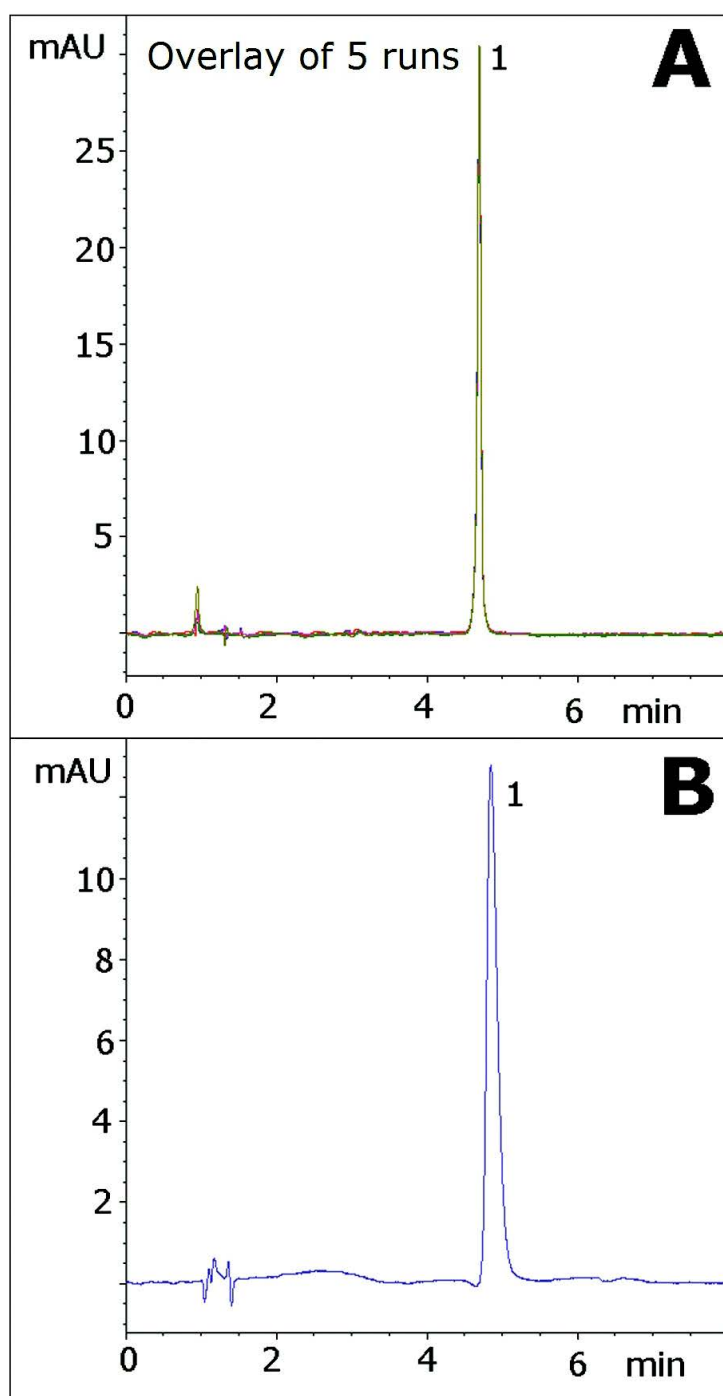


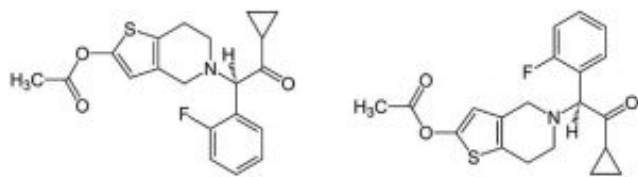
## Prasugrel Analyzed with HPLC – AppNote

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

**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®.



## Attachment

No 187 Prasugrel.pdf 0.7 Mb [Download File](#)

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