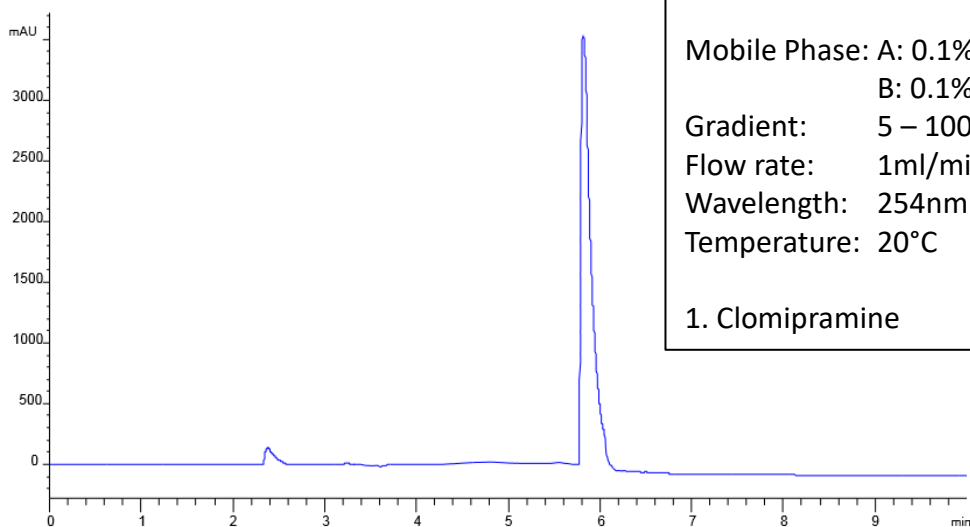
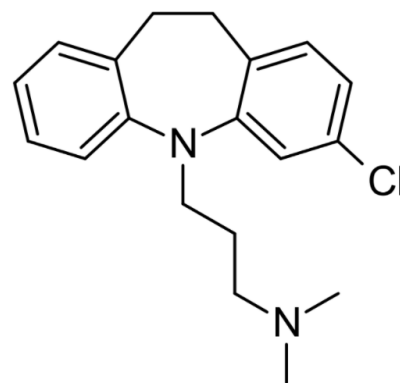


# Application Note: Clomipramine

Clomipramine, sold under the brand name Anafranil among others, is a tricyclic antidepressant (TCA). It is used for the treatment of obsessive-compulsive disorder, panic disorder, major depressive disorder, and chronic pain.

Clomipramine is a tricyclic compound, specifically a dibenzazepine, and possesses three rings fused together with a side chain attached in its chemical structure. Clomipramine is a derivative of imipramine with a chlorine atom added to one of its rings and is also known as 3-chloroimipramine. It is a tertiary amine, with its side chain-demethylated metabolite desmethylclomipramine being a secondary amine.

Clomipramine is marketed throughout the world mainly under the brand names Anafranil and Clomicalm for use in humans and animals, respectively.



**Column:** Horizon C18 5 $\mu$  150x4.6mm

**Mobile Phase:** A: 0.1% Formic acid in Water  
B: 0.1% Formic acid in MeCN

**Gradient:** 5 – 100% B in 10minutes

**Flow rate:** 1ml/min

**Wavelength:** 254nm

**Temperature:** 20°C

1. Clomipramine