

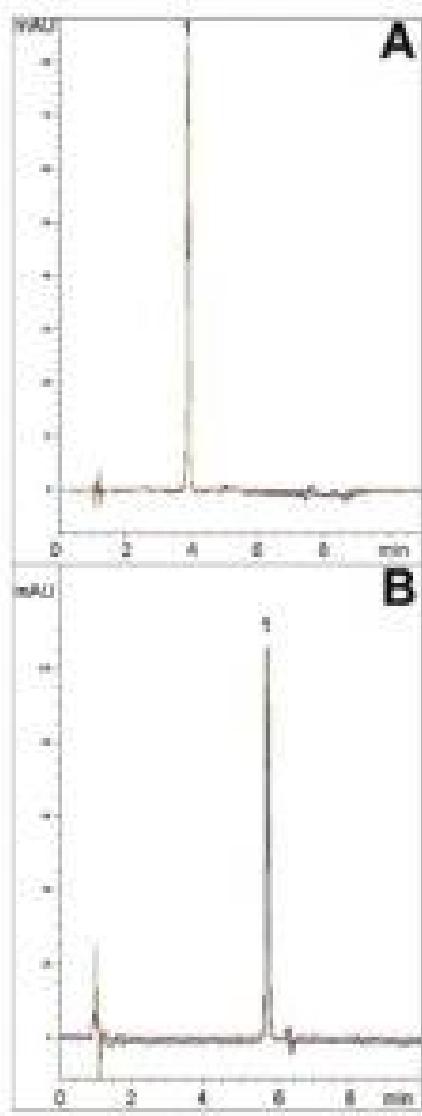


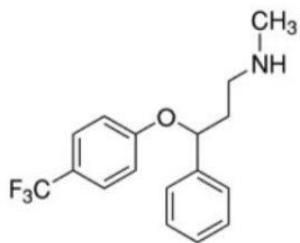
Fluoxetine Orthogonal Assay Method - AppNote

Simple Methods Without the Use of Ion-Pairing Agents

Unlike the USP assay method, Ion Pair Agents are not needed in this application. Both figures show how good Peak symmetry can be achieved either in the Reversed Phase (*RP, Figure A*) or Aqueous Normal Phase (*ANP, Figure B*) mode with only Formic Acid as the Mobile Phase additive.

The ability to perform the assay in either the RP or ANP mode is highly beneficial for development of orthogonal analytical.





Peak:

Fluoxetine

Method Conditions

Columns:

Fig. A: Cogent Phenyl Hydride™, 4 μm , 100 \AA

Fig. B: Cogent Diamond Hydride™, 4 μm , 100 \AA

Catalog No.:

Fig. A: 69020-7.5P

Fig. B: 70000.7.5P

Dimensions:

Fig. A: 4.6 x 75 mm

Fig. B: 4.6 x 75 mm

Mobile Phase:

A: DI Water / 0.1% Formic Acid

B: 97% Acetonitrile / 3% DI Water / 0.1% Formic Acid

Gradient:

Figure A.

Time (minutes)	%B
0	10
6	90
7	10

Figure B.

Time (minutes)	%B
0	95
6	60
7	95

Temperature:

Fig. A: 35°C

Fig. B: 25°C

Injection vol.: 10 μL

Flow rate: 1.0 mL / minute

Detection: UV @ 228nm

Sample: Fluoxetine capsule extract

Stock Solution: 20 mg strength capsule contents added to 100 mL volumetric flask, diluted to mark with 50:50 A:B, Vortexed 5 minutes, sonicated 5 minutes, then filtered through a 0.45µm Nylon Syringe Filter (MICROSOLV Technology Corp.).

Working Solution: 100µL stock diluted with 900µL 50:50 Solvent A: Solvent B

Notes: Fluoxetine is a widely prescribed anti-depressant which acts by selective inhibition of presynaptic Serotonin reuptake. In addition, Fluoxetine can also act as a non-competitive antagonist of Nicotinic Acetylcholine receptors. Sold as a Racemic mixture, Fluoxetine's R and S forms show similar efficacy *in vivo*, and its binding affinity has been shown to be largely stereo-independent.



Attachment No 127 Orthogonal Assay for Fluoxetine pdf 0.1 Mb [Download File](#)

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