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Propantheline Bromide HPLC Methods- AppNote

Orthogonal Methods without Ion-Pairing Agents

Click *HERE* for Column Ordering Information.

In the USP assay method for Propantheline Bromide tablets, Sodium Dodecyl Sulfate (SDS) is used as an Ion-Pairing Agent in the Mobile Phase. The long alkyl chain of this additive makes it particularly difficult and time consuming to load and remove from the HPLC column.

Is this method, not only is the need for Ion Pairing Agents eliminated but the assay can be performed in either the Reversed Phase (Figure A) or Aqueous Normal Phase mode (Figure B).

The Mobile Phase solvents can be used for many methods using these columns. Both methods illustrate good repeatability, with each run from the five-run overlays shown in a different color.

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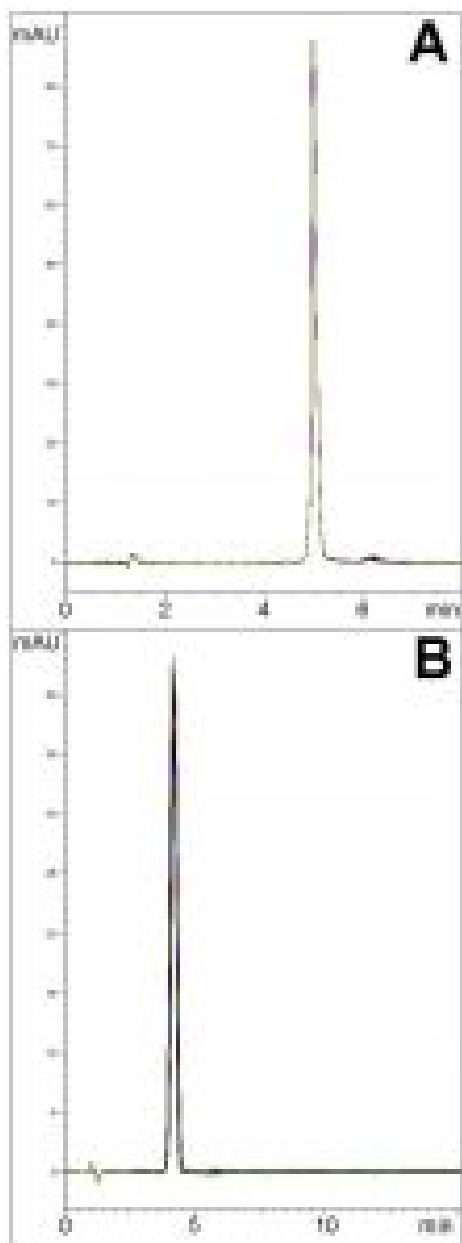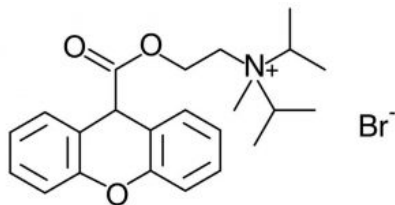
Method Conditions

Columns:

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

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

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
4	50
5	10

Figure B.

Time *(minutes)*	%B
0	80
4	70
5	80

Temperature:

  Fig. A: 35˚C

Fig. B: 25˚C

Injection vol.: 10µL

Flow rate: 1.0mL / minute

Detection: UV @ 254nm

Sample:

 Stock Solution: 1.0mg Propantheline Bromide Diluted with 1 mL of 50:50 A:B

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

Note: *Propantheline Bromide is a Muscarinic Acetylcholine receptor antagonist which is used for the treatment of ulcers, cramps and spasms of the digestive system, and hyperhidrosis.*

Attachment

No 132 Orthogonal Methods for Propantheline Bromide pdf 0.3 Mb Download File