

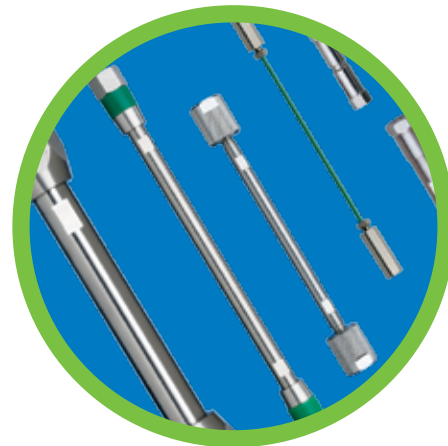
Solve Tough Pharmaceutical Analysis Problems

with VisionHT™ Media Platform Columns

- Speed and resolution on any system - LC, UHPLC, or Semi-Prep
- 1.5-10µm orthogonal chemistries simplify separation strategies
- Single particle technology improves laboratory and organizational efficiency.

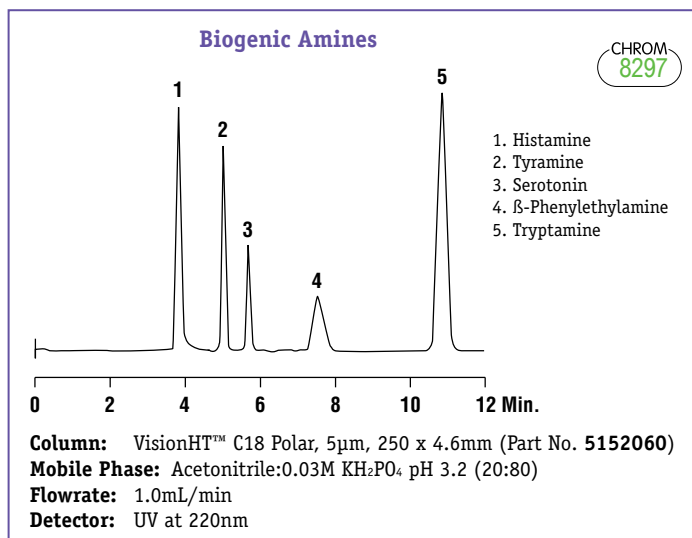
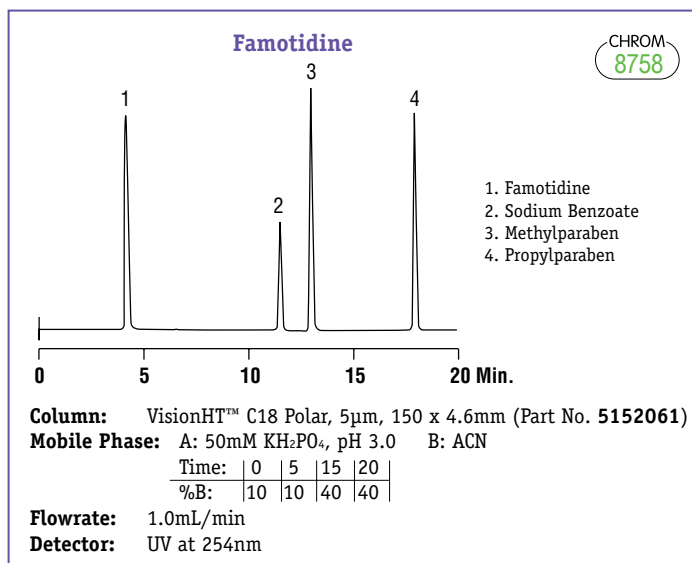
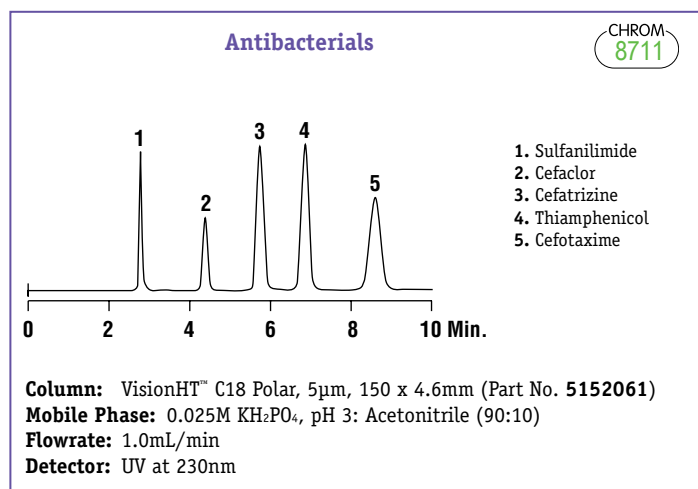
In pharmaceutical analysis, VisionHT™'s utility ranges from general USP methods to specific in-process testing. For drug purity analysis, the polar selective phases (VisionHT™ C18 Polar and C18 Basic) can be used to increase resolution between parent compounds and degradants.

For example, degradants of benzodiazepines are well resolved on VisionHT™ C18 Basic. During method development, VisionHT™ C18 Basic and VisionHT™ C18 Polar columns can be used to generate alternative selectivities to most base-deactivated columns.



VisionHT™ Media Platform Specifications

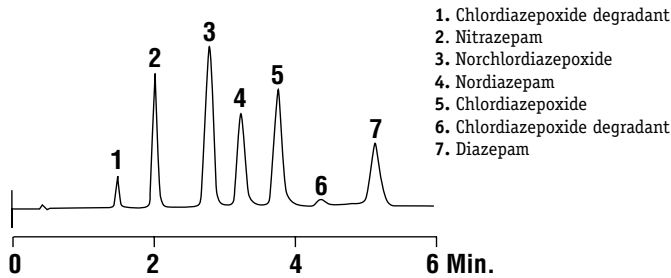
Particle Size:	1.5, 3.0, 5.0, 10µm
Base Silica:	High Purity Type B
Pore Size:	100Å for C18 Classic & C18 Polar 120Å for C18 Basic & C18 High Load
Surface Area:	200m ² C18 Classic & C18 Polar 220m ² C18 Basic & C18 High Load
pH Stability:	1-10
Pressure Rating:	16,000psig (UHPLC formats)



Grace Davison Discovery Sciences

Benzodiazepines and Metabolites

CHROM
8691

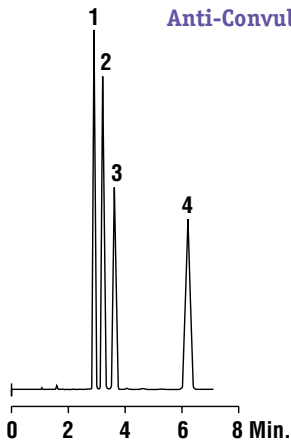


1. Chlordiazepoxide degradant
2. Nitrazepam
3. Norchlordiazepoxide
4. Nordiazepam
5. Chlordiazepoxide
6. Chlordiazepoxide degradant
7. Diazepam

Column: VisionHT™ C18 Polar, 3µm, 53 x 7mm Rocket™ (Part No. 5152074)
Mobile Phase: 0.05M Ammonium Acetate, pH5.5: Acetonitrile (65:35)
Flowrate: 3.0mL/min
Detector: UV at 254nm

Anti-Convulsants

CHROM
8163

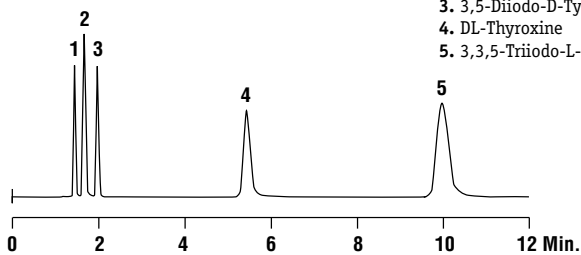


1. Ethotoin
2. Methsuximide
3. Methetoin
4. Carbamazepine

Column: VisionHT™ C18 Polar, 5µm, 150 x 4.6mm (Part No. 5152061)
Mobile Phase: Methanol:Acetonitrile:0.005M NaH₂PO₄, pH 5.5, (30:20:50)
Flowrate: 1.0mL/min
Detector: UV at 220nm

Thyroid Chemicals

CHROM
8282

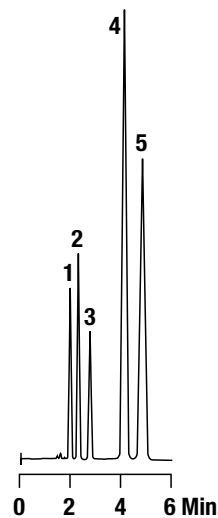


1. DL-Tyrosine
2. 3-Iodo-Tyrosine
3. 3,5-Diiodo-D-Tyrosine
4. DL-Thyroxine
5. 3,3,5-Triiodo-L-Thyronine

Column: VisionHT™ C18 Polar, 5µm, 150 x 4.6mm (Part No. 5152061)
Mobile Phase: 0.05M KH₂PO₄, pH 3.2: Acetonitrile (65:35)
Flowrate: 1.0mL/min
Detector: UV at 254nm

Sedatives/Hypnotics

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8160

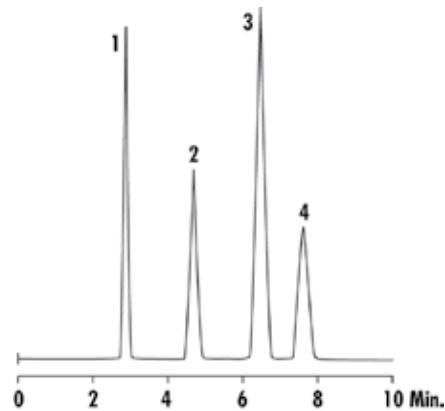


1. Barbitol
2. Phenobarbital
3. Butalbital
4. Oxazepam
5. Triazolam

Column: VisionHT™ C18 Basic, 5µm, 150 x 4.6mm (Part No. 5151993)
Mobile Phase: Methanol:Acetonitrile:0.05M NH₄H₂PO₄, pH 4.5, (50:10:40)
Flowrate: 1.0mL/min
Detector: UV at 230nm

Central and Respiratory Stimulants

CHROM
8169



1. Theophylline
2. Caffeine
3. Ethamivan
4. 8-Chlorotheophylline

Column: VisionHT™ C18 Polar, 5µm, 150 x 4.6mm (Part No. 5152061)
Mobile Phase: Methanol:Acetonitrile:1% Acetic Acid, pH=3.2, (30:10:60)
Flowrate: 1.0mL/min
Detector: UV at 254nm