

## Armor™ C8 and C18 Columns

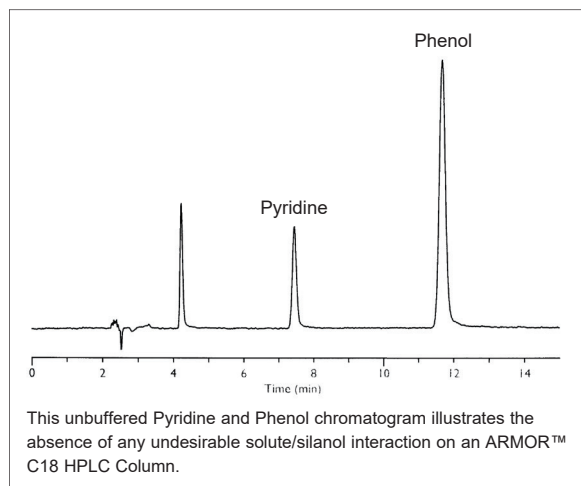
The Armor™ family of columns utilize a remarkable base deactivated material as tough as Armor. An added post-bonding process ensures the protection of the silica's silanol surface against the effects of solute-silanol interactions.

Since column stability and efficiency are primary issues for scientists developing fast HPLC methods with low detection limits, Armor™ columns are ideal for applications requiring an absence of secondary solute-silanol interaction.

Basic and acidic drugs and peptides can be chromatographed efficiently with little or no buffer, where acetic acid or formic acid can be substituted for TFA resulting in significant signal increase.

Advantage™ Armor™ columns exhibit extremely fast equilibration kinetics from high to low organic phase compositions. They also work well in 100% aqueous conditions for hydrophilic applications.

- Ideal for LC-MS: 3 to 5 fold sensitivity increase
- No tailing of basic and acidic analytes
- Batch to batch reproducibility
- Long column life
- Offered in a wide range of formats



### Advantage Armor™ Specifications

**Phase:** C8 and C18  
**Particle Size:** 3µm and 5µm  
**Pore Size:** 120Å  
**Pore Volume:** 0.8mL/gm  
**Surface Area:** 330m<sup>2</sup>/gm  
**% Carbon:** C8=8%, C18=16%  
**Phase Type:** Monofunctional with a unique polar and bulky end-capping.  
**Silica Class:** Type B  
**Hardware:** PEEK™ & Stainless Steel Columns and Cartridges

## Armor™ Analytical Columns

C18 120Å, 1.9µm

Cat. No.	Description
ADV7108	50cm x 2.1mm ID

C18 120Å, 3µm

Cat. No.	Description
ADV7329	3.0cm x 4.6mm ID
ADV7300	5.0cm x 4.6mm ID
ADV7301	10.0cm x 4.6mm ID
ADV7302	15.0cm x 4.6mm ID
ADV7303	25.0cm x 4.6mm ID

ADV7330	3.0cm x 3.0mm ID
ADV7304	5.0cm x 3.0mm ID
ADV7305	10.0cm x 3.0mm ID
ADV7306	15.0cm x 3.0mm ID
ADV7307	25.0cm x 3.0mm ID

ADV7321	3.0cm x 2.1mm ID
ADV7308	5.0cm x 2.1mm ID
ADV7309	10.0cm x 2.1mm ID
ADV7310	15.0cm x 2.1mm ID
ADV7311	25.0cm x 2.1mm ID

C18 120Å, 5µm

Cat. No.	Description
ADV7029	3.0cm x 4.6mm ID
ADV7000	5.0cm x 4.6mm ID
ADV7001	10.0cm x 4.6mm ID
ADV7002	15.0cm x 4.6mm ID
ADV7003	25.0cm x 4.6mm ID

ADV7030	3.0cm x 3.0mm ID
ADV7004	5.0cm x 3.0mm ID
ADV7005	10.0cm x 3.0mm ID
ADV7006	15.0cm x 3.0mm ID
ADV7007	25.0cm x 3.0mm ID

ADV7021	3.0cm x 2.1mm ID
ADV7008	5.0cm x 2.1mm ID
ADV7009	10.0cm x 2.1mm ID
ADV7010	15.0cm x 2.1mm ID
ADV7011	25.0cm x 2.1mm ID



C8 120Å, 5µm

Cat. No.	Description
ADV5214	3.0cm x 4.6mm ID
ADV5215	5.0cm x 4.6mm ID
ADV5216	10.0cm x 4.6mm ID
ADV5217	15.0cm x 4.6mm ID
ADV5218	25.0cm x 4.6mm ID

ADV5260	3.0cm x 3.0mm ID
ADV5261	5.0cm x 3.0mm ID
ADV5262	10.0cm x 3.0mm ID
ADV5263	15.0cm x 3.0mm ID
ADV5264	25.0cm x 3.0mm ID

ADV5280	3.0cm x 2.1mm ID
ADV5281	5.0cm x 2.1mm ID
ADV5282	10.0cm x 2.1mm ID
ADV5283	15.0cm x 2.1mm ID
ADV5284	25.0cm x 2.1mm ID

## Armor™ Guard Cartridges & Holders

C8 & C18 Guard Cartridges: 5µm, 5/Pkg

Cat. No.	Description
ADV-A108	C8 Stainless Steel Guard Cartridge, 20mm x 3.2mm ID
ADV-A118	C18 Stainless Steel Guard Cartridge, 20mm x 3.2mm ID
ADV-A185	C18 PEEK™ Guard Cartridge, 20mm x 2.1mm ID

Fingertight Guard Holders for 20mm Columns

Cat. No.	Description
ADV-GuardFM	PEEK™ Guard Holder
ADV-GuardFF	Double Female Holder



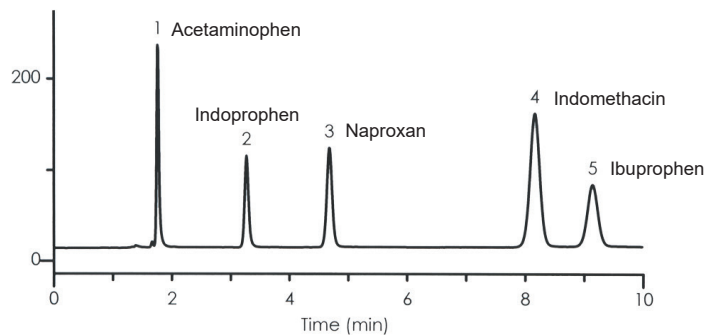
ADV-GuardFF

ADV-GuardFM

# Advantage Armor™ Premium HPLC Columns

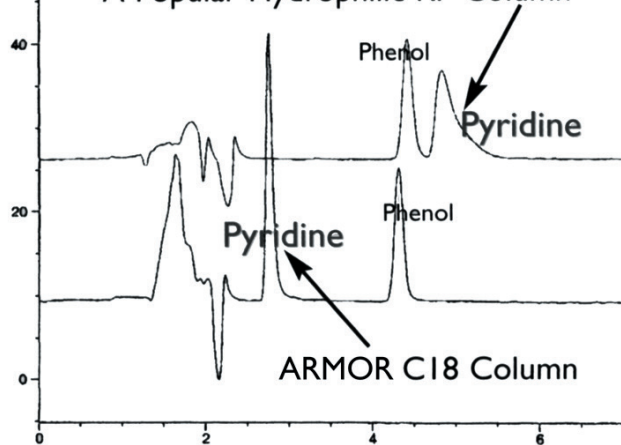
## Analgesics / Anti-Inflammatories

Catalog No.: ADV5217  
 Column: Armor™ C18 15cm x 4.6mm  
 Gradient: 45:55 20mM NaH<sub>2</sub>PO<sub>4</sub>:ACN pH 3.2  
 Flow: 1 mL/min,  
 Detector: UV @ 230 nm



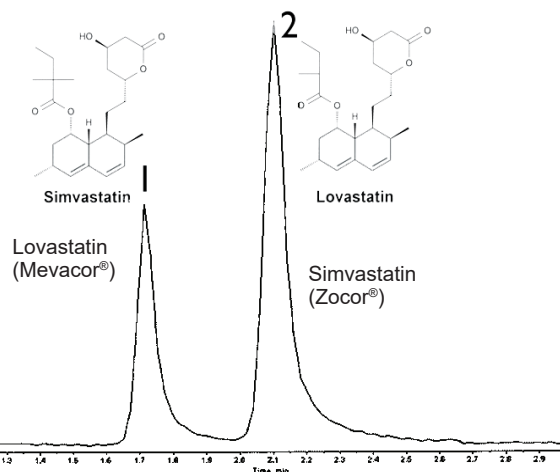
## Armor™ vs. Competitor's Hydrophilic Column

### A Popular Hydrophilic RP Column



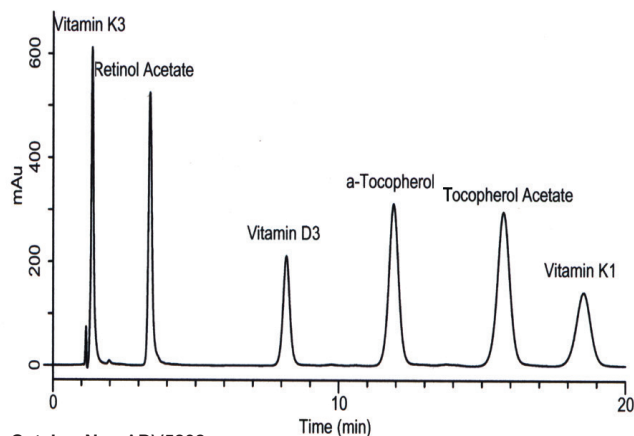
Catalog No.: ADV5217  
 Column: Armor™ C18 15 cm x 4.6 mm  
 Gradient: 20% MeCN/Water (Unbuffered)  
 Flow: 1 mL/min

## LC-MS/MS of Cholesterol-Synthesis Inhibitors



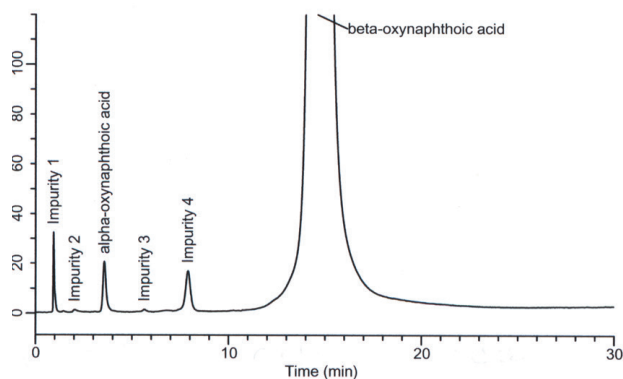
Catalog No.: ADV5215  
 Column: Armor™ C18 5cm x 4.6mm  
 Gradient: 82:18 50mM NH<sub>4</sub>O:ACN  
 Flow: 1 mL/min  
 Detector: API 3000, APCI Mode

## Fat-Soluble Vitamin Assay



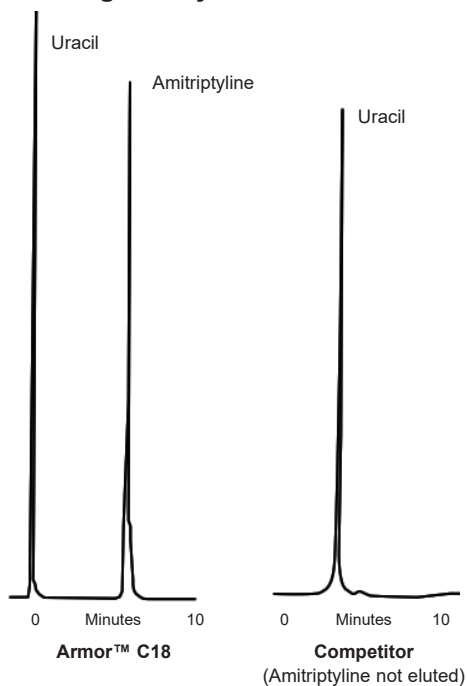
Catalog No.: ADV5282  
 Column: Armor™ C18 10cm x 2.1mm  
 Gradient: 3% Water in MeOH  
 Flow: 0.2mL/min.  
 Detector: DAD

## Oxynaphthoic Acid and Impurities



Catalog No.: ADV7009  
 Column: Armor™ C18 100mm x 2.1mm  
 Gradient: 50:50 MeOH:Water 0.5%TFA  
 Flow: 0.25 mL/min

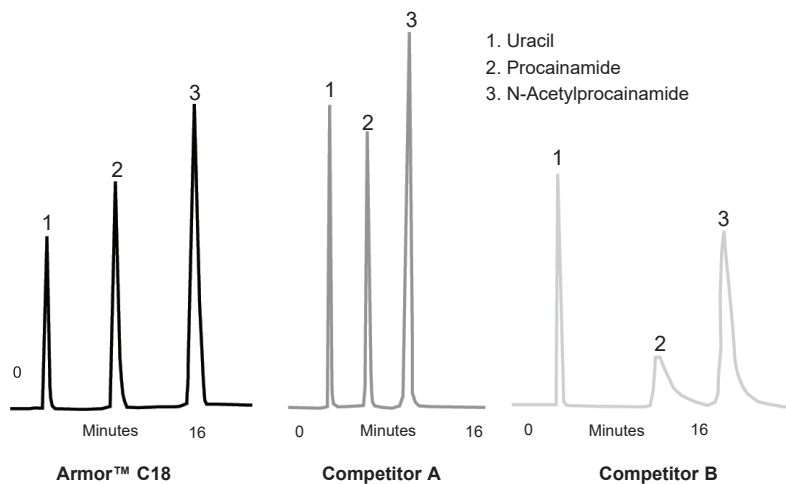
### Basic Drugs Analysis



Catalog No.: ADV7029

Column: Armor™ C18, 5 $\mu$ m, 30mm x 4.6mm  
Eluent: 10mM NaH<sub>2</sub>PO<sub>4</sub>, MeCN, 60:40  
Flow: 1.0 ml/min

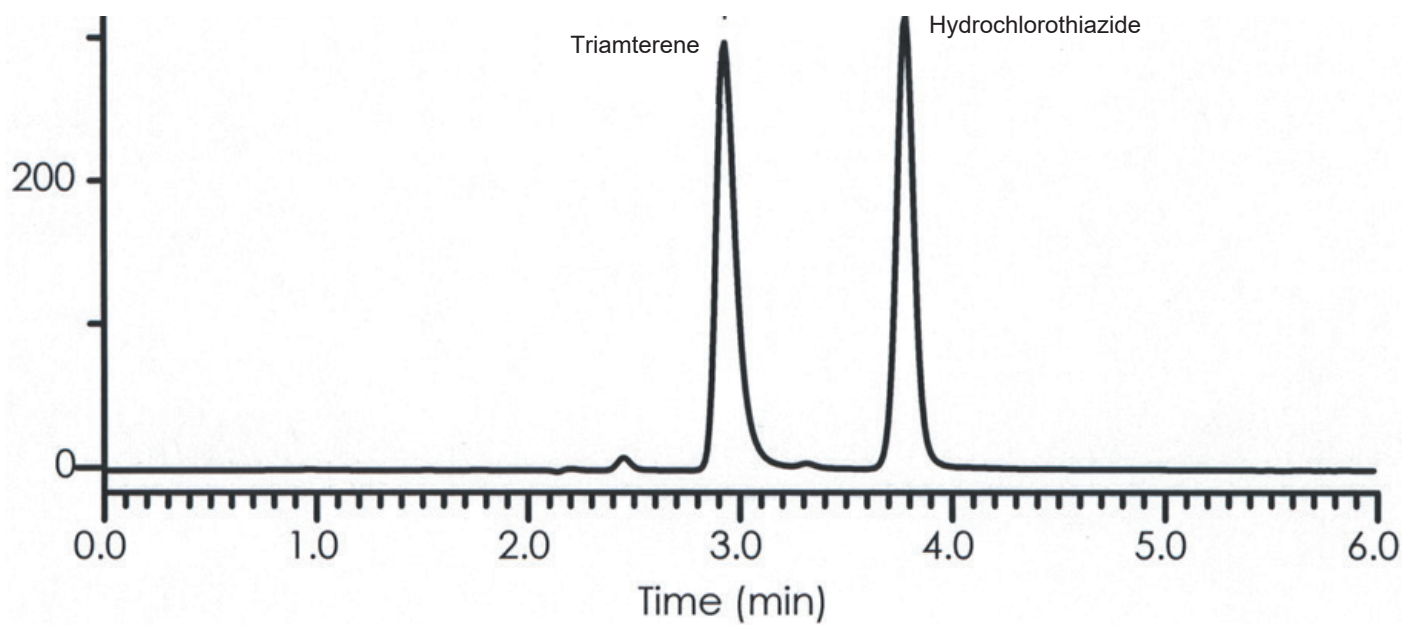
### Procainamide Test



Catalog No.: ADV7302

Column: Armor™ C18, 3 $\mu$ m, 150mm x 4.6mm  
Eluent: CH<sub>3</sub>CN:20mM PO<sub>4</sub> Buffer pH 7.6, 40:60  
Flow: 1 ml/min  
Detector: UV @ 254nm  
Temperature: 40°C

### Anti-Hypertensives



## Sprite™ Armor™ Direct Connect C18 HPLC Columns

Monofunctional with unique polar  
and bulky end-capping

- Fast HPLC analysis
- LC-MS applications
- PEEK™ / Titanium design



Cat. No.	Description
Sprite AC1842	5µm, 40mm x 2.1mm ID
Sprite AC1822	5µm, 20mm X 2.1mm ID
Sprite AC1832	5µm, 10mm x 2.1mm ID
Sprite A10-1842	10µm, 40mm x 2.1mm ID
Sprite A10-1822	10µm, 20mm x 2.1mm ID
Sprite A10-1832	10µm, 10mm X 2.1mm ID

## Armor™ Microbore Columns

C18 120Å, 3µm

Cat. No.	Description
ADV03M1A203	3.0cm x 1.0mm ID
ADV05M1A203	5.0cm x 1.0mm ID
ADV10M1A203	10.0cm x 1.0mm ID
ADV15M1A203	15.0cm x 1.0mm ID
ADV25M1A203	25.0cm x 1.0mm ID
ADV03M5A203	3.0cm x 0.5mm ID
ADV05M5A203	5.0cm x 0.5mm ID
ADV10M5A203	10.0cm x 0.5mm ID
ADV15M5A203	15.0cm x 0.5mm ID
ADV03M3A203	3.0cm x 0.3mm ID
ADV05M3A203	5.0cm x 0.3mm ID
ADV10M3A203	10.0cm x 0.3mm ID

C18 120Å 5µm

Cat. No.	Description
ADV03M1A205	3.0cm x 1.0mm ID
ADV05M1A205	5.0cm x 1.0mm ID
ADV10M1A205	10.0cm x 1.0mm ID
ADV15M1A205	15.0cm x 1.0mm ID
ADV25M1A205	25.0cm x 1.0mm ID
ADV03M5A205	3cm x 0.5mm ID
ADV05M5A205	5cm x 0.5mm ID
ADV10M5A205	10cm x 0.5mm ID
ADV15M5A205	15cm x 0.5mm ID
ADV03M3A205	3cm x 0.3mm ID
ADV05M3A205	5cm x 0.3mm ID
ADV10M3A205	10cm x 0.3mm ID

C8 120Å 5µm

Cat. No.	Description
ADV03M1B205	3cm x 1.0mm ID
ADV05M1B205	5cm x 1.0mm ID
ADV10M1B205	10cm x 1.0mm ID
ADV15M1B205	15cm x 1.0mm ID
ADV25M1B205	25cm x 1.0mm ID
ADV03M5B205	3.0cm x 0.5mm ID
ADV05M5B205	5.0cm x 0.5mm ID
ADV10M5B205	10.0cm x 0.5mm ID
ADV15M5B205	15.0cm x 0.5mm ID
ADV03M3B205	3.0cm x 0.3mm ID
ADV05M3B205	5.0cm x 0.3mm ID
ADV10M3B205	10.0cm x 0.3mm ID

## Armor™ Semi-Prep & Prep Columns

C18 120Å, 5µm

Cat. No.	Description
ADV721010	10.0cm x 10mm ID
ADV721510	15.0cm x 10mm ID
ADV722510	25.0cm x 10mm ID
ADV721020	10.0cm x 20mm ID
ADV721520	15.0cm x 20mm ID
ADV722520	25.0cm x 20mm ID

C18 120Å, 10µm

Cat. No.	Description
ADV711010	10.0cm x 10mm ID
ADV711510	15.0cm x 10mm ID
ADV712510	25.0cm x 10mm ID
ADV711020	10.0cm x 20mm ID
ADV711520	15.0cm x 20mm ID
ADV712520	25.0cm x 20mm ID

C8 120Å, 5µm

Cat. No.	Description
ADV731010	10.0cm x 10mm ID
ADV731510	15.0cm x 10mm ID
ADV732510	25.0cm x 10mm ID
ADV731020	10.0cm x 20mm ID
ADV731520	15.0cm x 20mm ID
ADV732520	25.0cm x 20mm ID

ADV20-HOLD25



## Armor™ Prep & Semi-Prep Guard Cartridges & Holders

C18 Cartridges

Cat. No.	Description
ADV0310-171	C18, 10µm, 30mm x 10mm ID, 2/Pkg
ADV0220-171	C18, 10µm, 25mm x 20mm ID, 2/Pkg

Holders

Cat. No.	Description
ADV10-HOLD30	Semi-Prep Guard Cartridge Holder, 10mm ID
ADV20-HOLD25	Prep Guard Cartridge Holder, 20mm ID

For pricing, see [analytical-sales.com](http://analytical-sales.com)