

ACCLAIM AmG C18 COLUMNS

Quick Start

Acclaim AmG C18, 3 μ m, 2.1 \times 150 mm (P/N: 088753)
 Acclaim AmG C18, 3 μ m, 3.0 \times 150 mm (P/N: 088755)
 Acclaim AmG C18, 3 μ m, 4.6 \times 150 mm (P/N: 088757)
 Acclaim AmG C18, 3 μ m, 2.1 \times 10 mm Guard Cartridges 2/pk (P/N: 088754)
 Acclaim AmG C18, 3 μ m, 3.0 \times 10 mm Guard Cartridges 2/pk (P/N: 088756)
 Acclaim AmG C18, 3 μ m, 4.6 \times 10 mm Guard Cartridges 2/pk (P/N: 088758)

1. Overview

Thermo Scientific™ Acclaim™ AmG C18 column is specifically designed for ion-pairing reversed-phase HPLC separation of aminoglycoside antibiotics. The stationary phase is based on a covalently bonded C18 ligand on a polymer encapsulated silica, resulting in superior stability under extreme operating conditions (e.g. 100 mM TFA). This column provides high resolution and excellent selectivity for the aminoglycoside antibiotics analysis.

2. Main features of the Acclaim AmG C18 Column

- Excellent overall selectivity for aminoglycosides
- Superior tolerance towards acidic conditions
- High efficiency and throughput
- Ease to use

3. Specifications and Recommended Operational Parameters

Parameter	Recommendation
Flow Rate Range:	0.8 – 1.5 mL/min for the 4.6 mm I.D. column 0.4 – 0.6 mL/min for the 3.0 mm I.D. column 0.2 – 0.3 mL/min for the 2.1 mm I.D. column
Column Storage	Long term: 70% acetonitrile + 30% 100 mM ammonium acetate, pH 5.2 Short term: mobile phase
	Performance Test 70% acetonitrile + 30% 100 mM ammonium acetate, pH 5.2
Common Mobile Phases	Aminoglycoside Analysis 100 mM trifluoroacetic acid (TFA) Pentafluoropropionic acid (PFPA) / heptafluorobutyric acid (HFBA) aqueous solution (optional) Acetonitrile (optional)
Solvents Compatibility	Compatible with 100% organic solvent
Aqueous Compatibility	Compatible with 100% aqueous solution
Temperature Range:	Up to 80 °C
Pressure Limit	8,000 psi
pH Range	0.5 – 10

4. Operational Guidelines

- Operate the column within operating parameters and specifications (described in Section 3).
- Use the column in the direction of flow marked on the column.
- Avoid any sudden pressure surge.
- Condition and equilibrate the column for at least 2 hours using the starting mobile phase (e.g. 100 mM TFA) to achieve the reproducible results.
- Store the column in 70% acetonitrile and 30% 100 mM ammonium acetate (pH 5.2) for long-term storage, and mobile phase for short-term storage.
- Always use guard column for real samples to protect the analytical column and extend its useful lifetime.
- Wash column with acetonitrile at 60 °C for at least 2 hours if the peak tailing issue is observed.

5. Ordering Information

	Particle Size	Column Dimensions	P/N
Analytical Column	3µm	2.1 x 150mm	088753
		3.0 x 150 mm	088755
		4.6 x 150 mm	088757
Guard Cartridges	3µm	2.1 x 10 mm (2/pk)	088754
		3.0 x 10 mm (2/pk)	088756
		4.6 x 10 mm (2/pk)	088758
Guard Holder			069580