



ThermoFisher
SCIENTIFIC

提供您全方位的分析實驗耗材

分析級UHPLC 和 HPLC 管柱

LINE Official Account

**好友
募集中**

@analab

您可在LINE獲得優惠券喔!



Gain more resolution with Acclaim columns

在分析鹼性化合物時分不開？

✓ Thermo Scientific™ Acclaim™ Polar Advantage II (PA2) column

在分離相對離子(counter ion-製藥領域)遇到困難嗎？

✓ Thermo Scientific™ Acclaim™ Trinity™ P1 column

需要分析介面活性劑？

✓ Thermo Scientific™ Acclaim™ Surfactant Plus column

兩支樣品峰太過相近分不開？

✓ Thermo Scientific™ Acclaim™ Mixed-mode columns

Broad range of HPLC and UHPLC columns for challenging separation needs

- **General-purpose RP**

使用高表面積管柱來分析複雜樣品 (C18, etc)

- **Mixed-mode**

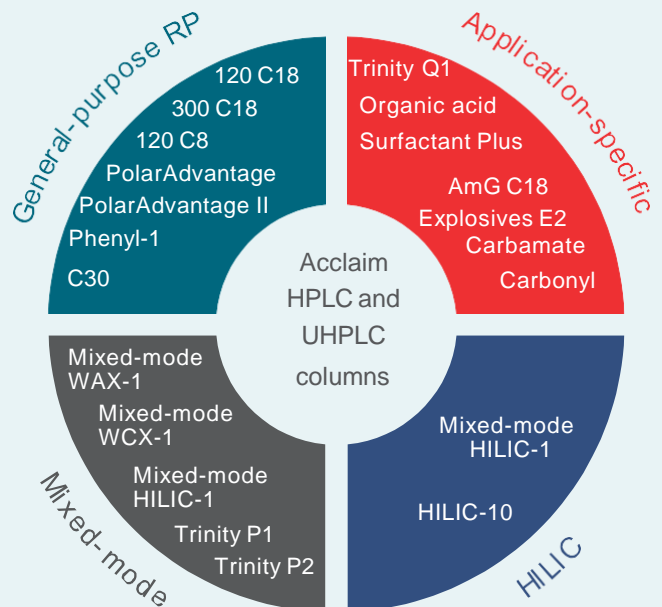
可在一支管柱中分析含有多種不同滯留類型的樣品

- **Application-specific**

特殊應用的獨特管柱：表面活性劑，有機酸，農藥，氨基糖苷，爆炸性殘留物。

- **HILIC**

適合分離極性化合物



Acclaim™ 管柱選擇指南

Please refer to www.thermo.com/LCcolumns for more information

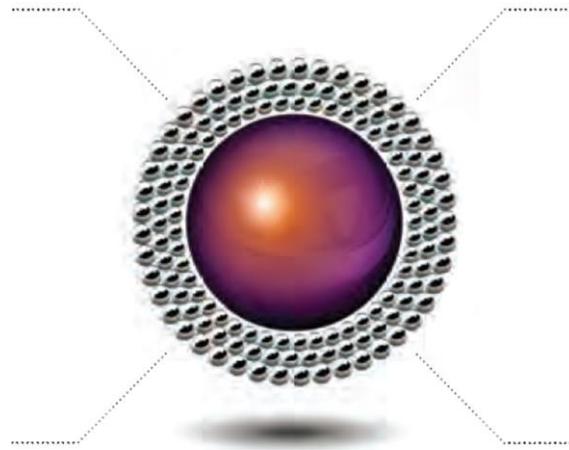
		Mixed-Mode										HILIC	SEC	Application-Specific					Examples of Applications								
		Acclaim 120 C18	Acclaim 120 C8	Acclaim 300 C18	Acclaim Polar Advantage (PA)	Acclaim Polar Advantage II (PA2)	Acclaim C30	Acclaim Phenyl-1	Acclaim Trinity	P1	Acclaim Trinity P2	Acclaim Mixed-Mode WAX-1	Acclaim Mixed-Mode WCX-1	Acclaim Mixed-Mode HILIC-1	HILIC-10	Acclaim SEC-300 & 1000	Acclaim	Organic Acid		Acclaim	Surfactant/PIG	Acclaim Carbonyl	Acclaim Explosives	E2 Acclaim	Carbamate	Acclaim AmG	
General	Neutral Molecules	High hydrophobicity																								Fat-soluble vitamins, PAHs, glycerides	
		Intermediate hydrophobicity																									Steroids, phthalates, pheromones, polychlorinated
		Low hydrophobicity																									Acetaminophen, urea, polyethylene glycols
	Anionic Molecules	High hydrophobicity																									NSAIDs, phospholipids
		Intermediate hydrophobicity																									Aspirin, alkyl acids, aromatic acids
		Low hydrophobicity																									Small organic acids, e.g. acetic acids
	Cationic Molecules	High hydrophobicity																									Antidepressants
		Intermediate hydrophobicity																									Beta blockers, benzidines, alkaloids
		Low hydrophobicity																									Antacids, pseudoephedrine, biogenic amines
	Amphiphilic/Zwitterionic Molecules	High hydrophobicity																									Phospholipids
		Intermediate hydrophobicity																									Amphoteric surfactants, peptides
		Low hydrophobicity																									Amino acids, aspartame, small peptides
	Mixtures of Neutral, Anionic, Cationic Molecules	Neutrals and acids																									Artificial sweeteners
		Neutrals and bases																									Cough syrup
		Acids and bases																									Drug active ingredient with counterion
		Neutrals, acids, and bases																									Combination pain relievers, PEG
	Surfactants	Anionic																									SDS, LAS, lauryl sulfates
		Cationic																									Quats, benzalkonium in medicines
Nonionic																										Triton X-100 in washing tank	
Amphoteric																										Cocamidopropyl betaine	
Hydrotopes																										Xylenesulfonates in hand soap	
Surfactant blends																										Nonionic and anionic surfactants	
Organic Acids	Hydrophobic																									Aromatic acids, fatty acids	
	Hydrophilic																									Organic acids in soft drinks, pharmaceuticals	
Specific	Environmental Contaminants	Explosives																								U.S. EPA Method 8330, 8330B	
		Carbonyl compounds																									U.S. EPA 1667, 565, OT-11; CACARB 1004
		Phenols																									Compounds regulated by U.S. EPA 604
		Chlorinated/Phenoxy acids																									U.S. EPA Method 565
		Triazines																									Compounds regulated by U.S. EPA 619
		Nitrosamines																									Compounds regulated by U.S. EPA 8270
		Benzidines																									U.S. EPA Method 605
		Perfluorinated acids																									Donex TN73
		Macrocystins																									ISO 20179
		Isoyanates																									U.S. OSHA Methods 42, 47
		Carbamate insecticides																									U.S. EPA Method 531.2
Vitamins	Water-soluble vitamins																									Vitamins in dietary supplements	
	Fat-soluble vitamins																									Vitamin pills	
Pharmaceutical Counterions	Anions																									Inorganic anions and organic acids in drugs	
	Cations																									Inorganic cations and organic bases in drugs	
	Mixture of Anions and Cations																									Screening of pharmaceutical counterions	
	API and counterions																									Naproxen Na ⁺ salt, meliframin Cl ⁻ salt, etc.	
Industry	Hydrophilic cations																									Antibiotics, aminoglycosides	
		Water soluble Polymers																								PEG, PVP, PAA, PEI,	

Core Enhanced Technology, Rugged and Reproducible Solid Core Particles

The key components of Core Enhanced Technology

Rugged and reproducible solid core particles
堅固的微粒、製程的優化及全面性的測試，使得column 壽命長且擁有良好的再現性。

Low Pressures
低背壓可適用於HPLC 系統；UHPLC 在較低的背壓下操作，可減少設備上的磨損。



Very fast separations with superb resolution
減少分析時間與溶劑的消耗，降低每一次分析的成本；提供高解析度和最佳之峰形，達到更高靈敏度及準確度，特別是低濃度Impurity 的分析

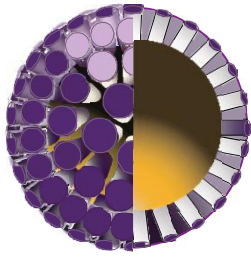
Wide Selectivity
14 種不同phases 提供大量的選擇，使得在方法開發上更加便利且快速，確信能從其中找到合適的column。

	Solid Core Particles	Tight Control of Particle Diameter	Advanced Bonding Technology	Automated Packing Process
Fast Separations	•	•	•	•
High Peak Capacity	•	•	•	•
Increased Sensitivity	•	•	•	•
Lower Pressure	•	•	•	•
Loading Capacity	•	•	•	•
Reproducible Chromatography	•	•	•	•
Long Lifetime	•	•	•	•
Wide Selectivity	•	•	•	•

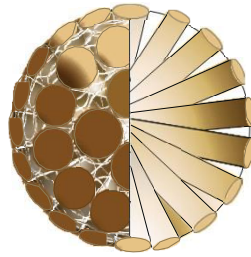
★ Accucore Column 三大系列

- Accucore HPLC column:** 在一般的HPLC 系統，使用Accucore 2.6 μ m column 可得到 UHPLC sub-2 μ m 相同之快速、高解析的分析，且柱壓減低 50%。
- Accucore column for Biomolecules:** 150Å 大孔徑適用於 protein、peptides 和多聚醣等生物分子的分析。
- Accucore XL HPLC column:** 4 μ m 改善標準 HPLC 分析的效果和耐用性。

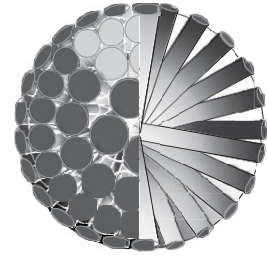
UHPLC & HPLC 管柱產品系列列表



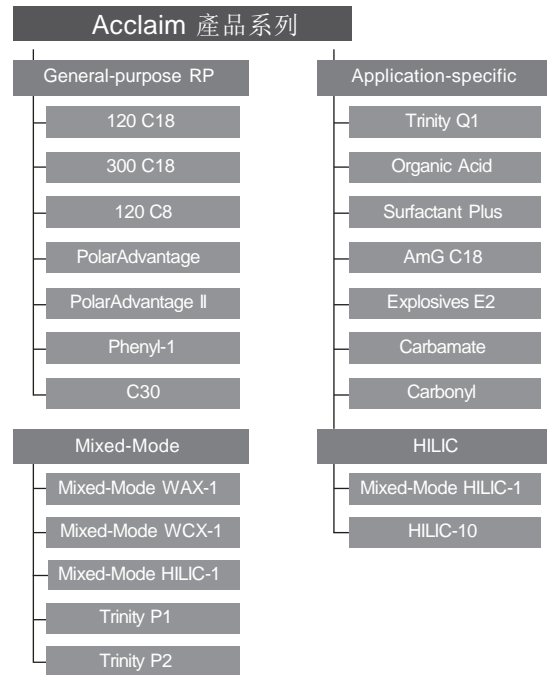
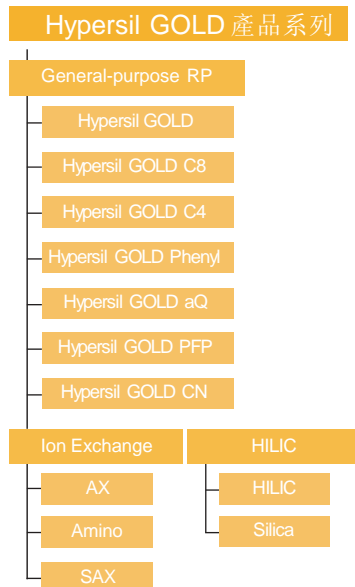
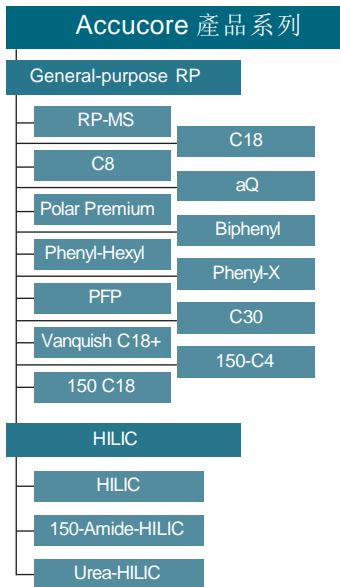
實心核顆粒
Sub-2µm 管柱能在LC系統中
提供高解析度。



最高等級的
解析度
分析效率
靈敏度



面對極複雜的樣品也能
有優秀的解析能力。



快速選擇指南

		C18固定相	極性固定相	芳香固定相	親水性固定相
樣品複雜程度 (低→中)	全孔性	Hypersil GOLD columns	Hypersil GOLD aQ columns	Hypersil GOLD PFP columns	Hypersil GOLD HILIC columns
	實心核	Accucore RP-MS columns	Accucore aQ columns	Accucore Phenyl-Hexyl columns	Accucore HILIC columns
樣品複雜程度 (高)	全孔性	Acclaim 120 C18 columns	Acclaim Polar Advantage II columns	Acclaim Phenyl-1 columns	Acclaim HILIC-10 columns
	實心核	Accucore C18 columns	Accucore Polar Premium columns	Accucore Biphenyl columns	Accucore Amide-HILIC columns

Thermo
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Synchronis column

LOT-TO-LOT, 分析再現專用管柱

★ Synchronis Column 特性

1. 高純度 Silica → LOT-TO-LOT 之 Test Bond phase → 自動填充管柱系統 → COA → 確保每支管柱之再現性(一致性)。
2. 每批次 Bond phase (Gel)均經過嚴格的製造過程與測試。
3. 對鹼性化合物不會有拖尾的現象 (For C18、C8、aQ、Phenyl)。
4. 可使用 100%水溶液移動相 (For aQ)。
5. 1.7 μ m 粒徑用於 UHPLC 快速分析, 5 μ m 粒徑用於一般 HPLC 分析。
6. 每批次 Bond phase (Gel)均經過嚴格的製造過程與測試。

Enhanced Retention

