



# Premier色谱柱系列

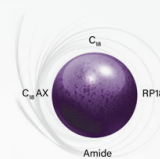
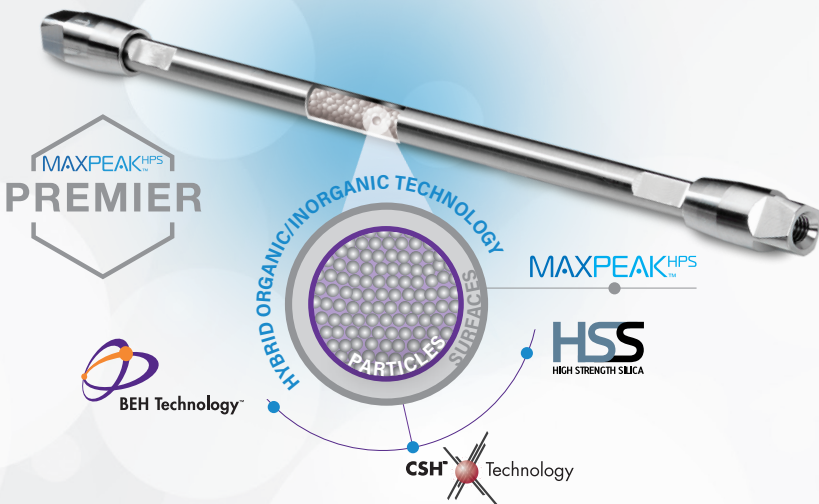
## 追求更出众的色谱性能

Waters™ Premier色谱柱采用MaxPeak™高性能表面技术，通过减少金属敏感化合物与表面间的作用力造成的样品损失（例如脂类、有机酸、酸性肽、寡核苷酸或者其他包含磷酸或者羧酸官能团），从而提高化合物回收率、灵敏度和重现性。Premier色谱柱延续先进的颗粒技术与严格的质量控制，适用于反相或亲水模式下小分子、多肽、寡核苷酸和多糖的分离。

采用MaxPeak HPS的Premier色谱柱能带来：

- 减少色谱柱活化或钝化时间
- 提高灵敏度，改善峰形
- 流动相简单常用，无需复杂添加剂
- 节省方法开发时间
- 降低风险，数据结果可靠性更高

MAXPEAK HPS™



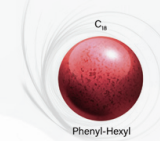
BEH技术

- 通用性极强，适用于各种化合物
- pH1 - 12范围内稳定，并耐受高温
- 对于碱性化合物，使用高pH条件获得更好的保留和峰形



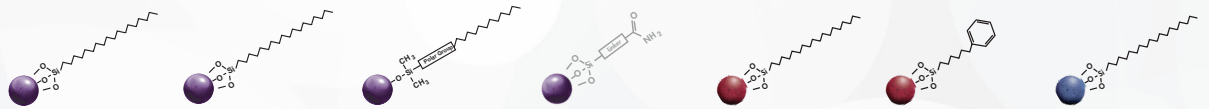
HSS技术

- 高强度硅胶，机械强度与稳定性更耐受
- 反相条件下增强极性化合物保留



CSH技术

- 低离子强度流动相条件下改善碱性化合物峰形
- 流动相使用甲酸能带来良好的质谱信号
- 更快速的pH切换和色谱柱平衡

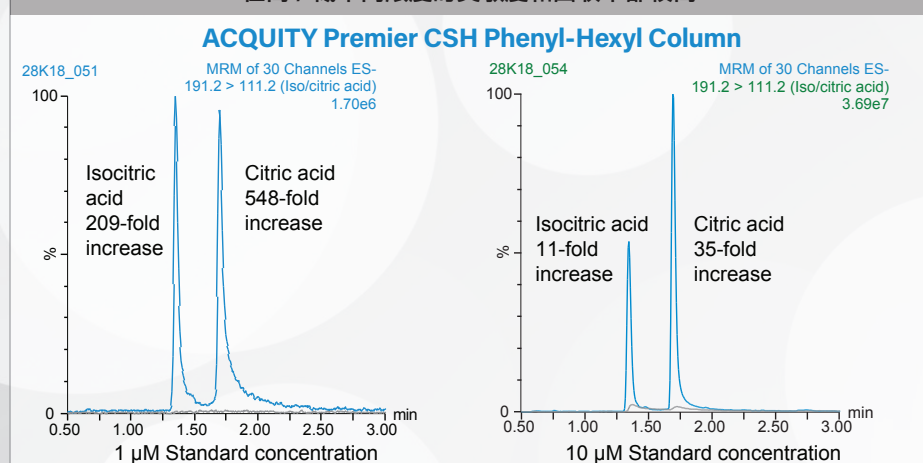


	C <sub>18</sub>	C <sub>18</sub> AX	Shield RP18	Amide	CSH C <sub>18</sub>	CSH Phenyl-Hexyl	HSS T3
配基密度*	3.1 μmol/m <sup>2</sup>	1.6 μmol/m <sup>2</sup>	3.3 μmol/m <sup>2</sup>	7.5 μmol/m <sup>2</sup>	2.3 μmol/m <sup>2</sup>	2.3 μmol/m <sup>2</sup>	1.6 μmol/m <sup>2</sup>
孔径	130 Å, 300 Å	95 Å	130 Å	130 Å	130 Å	130 Å	100 Å
碳载量*	18%	17%	17%	12%	15%	14%	11%
封端类型	proprietary	proprietary	TMS	none	proprietary	proprietary	proprietary
pH范围	1-12	2-10	2-11	2-11	1-11	1-11	2-8
低pH温度限制	80 °C	60 °C	50 °C	90 °C	80 °C	80 °C	45 °C
高pH温度限制	60 °C	60 °C	45 °C	90 °C	45 °C	45 °C	45 °C
表面积*	185 m <sup>2</sup> /g	270 m <sup>2</sup> /g	185 m <sup>2</sup> /g	185 m <sup>2</sup> /g	185 m <sup>2</sup> /g	185 m <sup>2</sup> /g	230 m <sup>2</sup> /g
USP分类号	L1	L78	L1	L68	L1	L11	L1

## 小分子应用

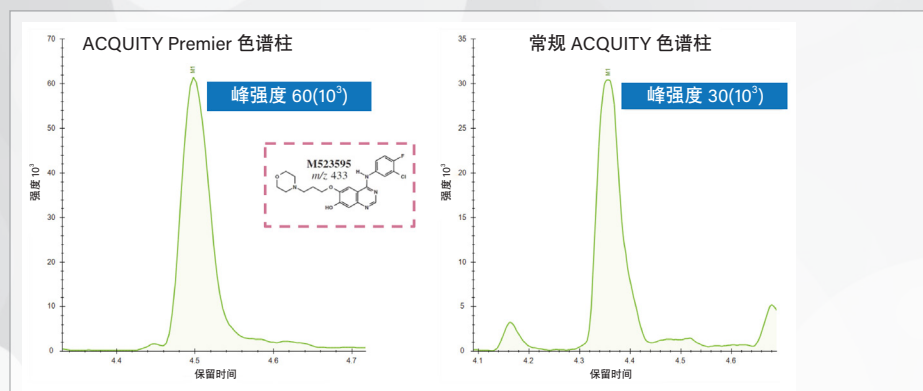
## TCA循环相关分析物

在高 / 低不同浓度时灵敏度和回收率都较高



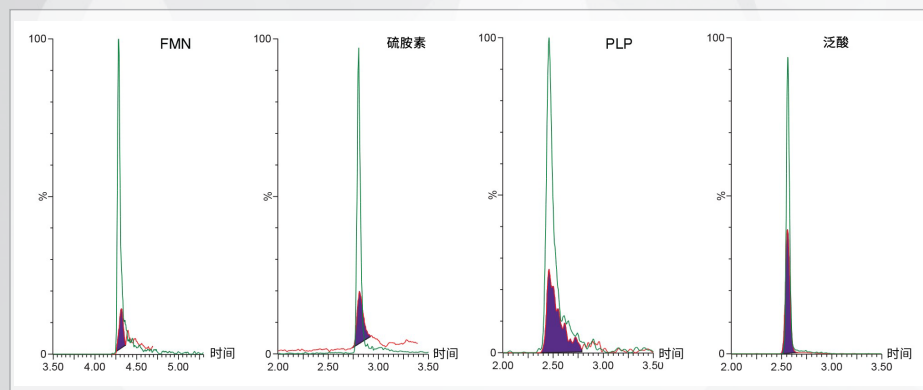
柠檬酸和异柠檬酸为富电子化合物，使用ACQUITY Premier系列色谱柱，浓度为1  $\mu$ M柠檬酸峰面积提高548倍，异柠檬酸提高209倍；浓度为10  $\mu$ M柠檬酸峰面积提高35倍，异柠檬酸提高11倍。

## 吉非替尼代谢物



吉非替尼代谢物M523595的峰强度提高了一倍，从常规色谱柱30e<sup>3</sup>提高至Premier色谱柱60e<sup>3</sup>。

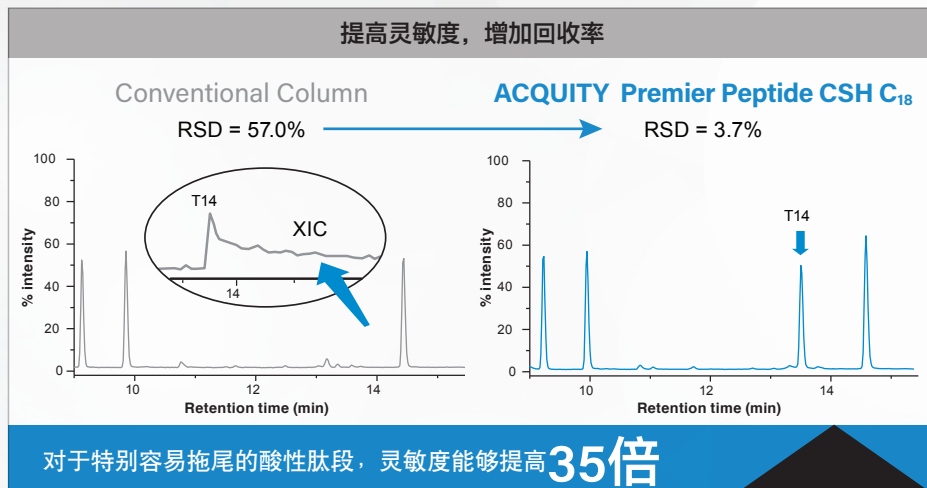
## B族维生素



FMN、硫胺素、PLP和泛酸使用Premier系统和色谱柱，峰强度明显提高，硫胺素、PLP峰宽更窄且峰拖尾更小。

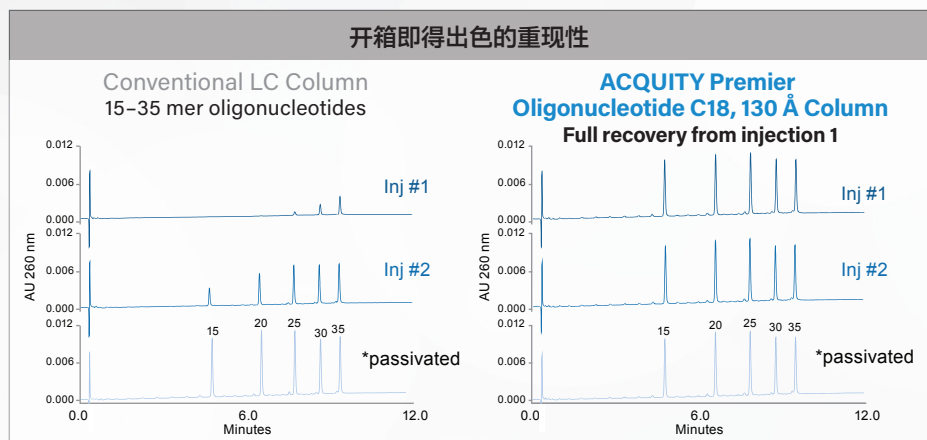
## 大分子应用

### 多肽分析

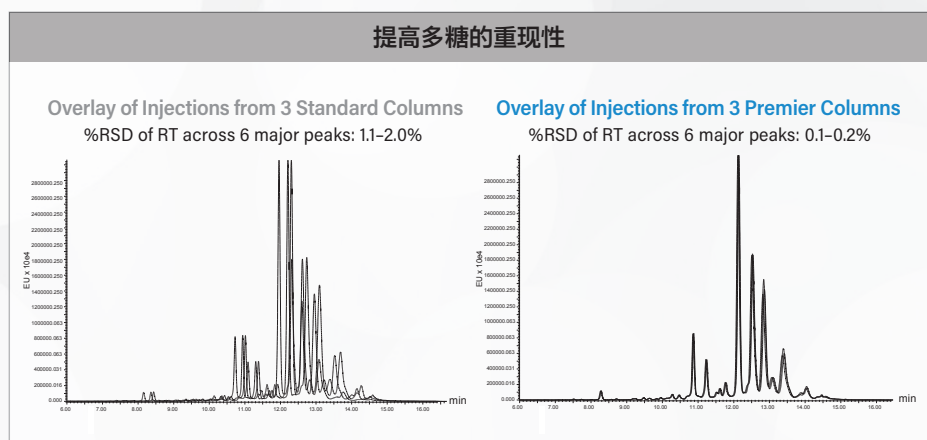


每批次的色谱填料都经过肽混标质控，更好的适应肽项目的严格要求，重现性更好。

### 寡核苷酸分析



### 多糖分析



## 订购信息

## ACQUITY™ Premier Columns

	2.1 x 50 mm		2.1 x 100 mm		2.1 x 150 mm	
	Column	VanGuard FIT Column	Column	VanGuard FIT Column	Column	VanGuard FIT Column
BEH C <sub>18</sub> , 130 Å, 1.7 µm	186009452	186009455	186009453	186009457	186009454	186009458
BEH Shield RP18, 130 Å, 1.7 µm	186009497	186009500	186009498	186009501	186009499	186009502
BEH Amide, 130 Å, 1.7 µm	186009504	186009507	186009505	186009508	186009506	186009509
CSH C <sub>18</sub> , 130 Å, 1.7 µm	186009460	186009463	186009461	186009464	186009462	186009465
CSH Phenyl Hexyl, 130 Å, 1.7 µm	186009474	186009477	186009475	186009478	186009476	186009479
HSS T3, 100 Å, 1.8 µm	186009467	186009470	186009468	186009471	186009469	186009472
<b>VanGuard FIT Cartridges</b>	<b>BEH C<sub>18</sub>, 130 Å, 1.7 µm</b>	<b>BEH Shield RP18, 130 Å, 1.7 µm</b>	<b>BEH Amide, 130 Å, 1.7 µm</b>	<b>CSH C<sub>18</sub>, 130 Å, 1.7 µm</b>	<b>CSH Phenyl Hexyl, 130 Å, 1.7 µm</b>	<b>HSS T3, 100 Å, 1.8 µm</b>
2.1 x 5 mm	186009459	186009503	186009510	186009466	186009480	186009473

## ACQUITY Premier Application-Specific Columns

	2.1 x 50 mm	2.1 x 100 mm	2.1 x 150 mm
Glycan BEH C <sub>18</sub> AX, 95 Å, 1.7 µm	186009758	186009759	186009760
Glycan BEH Amide, 130 Å, 1.7 µm	186009522	186009523	186009524
Glycoprotein BEH Amide, 300 Å, 1.7 µm	186009547	186009548	186009549
Oligonucleotide BEH C <sub>18</sub> , 130 Å, 1.7 µm	186009484	186009485	186009486
Peptide BEH C <sub>18</sub> , 130 Å, 1.7 µm	186009481	186009482	186009483
Peptide BEH C <sub>18</sub> , 300 Å, 1.7 µm	186009493*	186009494*	186009495*
Peptide CSH C <sub>18</sub> , 130 Å, 1.7 µm	186009487	186009488	186009489
Peptide HSS T3, 100 Å, 1.8 µm	186009490	186009491	186009492

\*Peptide BEH 300Å 色谱柱 (PN 186009493, 1186009494, 186009495) 大孔径可用于寡核苷酸的分析。

Atlantis™ Premier BEH C<sub>18</sub> AX, 95 Å Columns

	1.7 µm		2.5 µm		5 µm	
	Column	VanGuard FIT Column	Column	VanGuard FIT Column	Column	VanGuard FIT Column
2.1 x 30 mm	186009365	186009357	186009389	186009374	-	-
2.1 x 50 mm	186009366	186009358	186009390	186009375	186009407	186009404
2.1 x 75 mm	186009367	186009359	186009391	186009376	-	-
2.1 x 100 mm	186009368	186009360	186009392	186009378	186009408	186009405
2.1 x 150 mm	186009369	186009361	186009393	186009379	186009409	186009406
4.6 x 50 mm	-	-	186009426	186009383	186009427	186009410
4.6 x 100 mm	-	-	186009397	186009384	186009416	186009411
4.6 x 150 mm	-	-	186009398	186009385	186009417	186009412
4.6 x 250 mm	-	-	-	-	186009418	186009413
<b>VanGuard FIT Cartridges</b>	<b>1.7 µm</b>	<b>2.5 µm</b>	<b>5 µm</b>			
2.1 x 5 mm	186009373	186009402	186009421			
3.9 x 5 mm	-	186009403	186009422			

## 订购信息

## Premier 2.5 µm Columns

	2.1 x 50 mm		2.1 x 100 mm		2.1 x 150 mm	
	Column	VanGuard FIT Column	Column	VanGuard FIT Column	Column	VanGuard FIT Column
XBridge BEH C <sub>18</sub> , 130 Å, 2.5 µm	186009827	186009843	186009828	186009844	186009829	186009845
XSelect CSH C <sub>18</sub> , 130 Å, 2.5 µm	186009865	186009868	186009866	186009869	186009867	186009870
XSelect CSH Phenyl Hexyl, 130 Å, 2.5 µm	186009879	186009882	186009880	186009883	186009881	186009884
XSelect HSS T3, 100 Å, 2.5 µm	186009830	186009854	186009831	186009855	186009832	186009856
XBridge BEH Shield RP 18 130 Å, 2.5 µm	186009914	186009917	186009915	186009918	186009916	186009919
XBridge Amide 130 Å, 2.5 µm	186009928	186009931	186009929	186009932	186009930	186009933

	4.6 x 50 mm		4.6 x 100 mm		4.6 x 150 mm	
	Column	VanGuard FIT Column	Column	VanGuard FIT Column	Column	VanGuard FIT Column
XBridge BEH C <sub>18</sub> , 130 Å, 2.5 µm	186009847	186009850	186009848	186009851	186009849	186009852
XSelect CSH C <sub>18</sub> , 130 Å, 2.5 µm	186009872	186009875	186009873	186009876	186009874	186009877
XSelect CSH Phenyl Hexyl, 130 Å, 2.5 µm	186009886	186009889	186009887	186009890	186009888	186009891
XSelect HSS T3, 100 Å, 2.5 µm	186009858	186009861	186009859	186009862	186009860	186009863
XBridge BEH Shield RP 18 130 Å, 2.5 µm	186009921	186009924	186009922	186009925	186009923	186009926
XBridge Amide 130 Å, 2.5 µm	186009935	186009938	186009936	186009939	186009937	186009940

VanGuard FIT Cartridges	XBridge BEH C <sub>18</sub> , 130 Å, 2.5 µm	XSelect CSH C <sub>18</sub> , 130 Å, 2.5 µm	XSelect CSH Phenyl Hexyl, 130 Å, 2.5 µm	XSelect HSS T3, 100 Å, 2.5 µm	XBridge BEH Shield RP 18 130 Å, 2.5 µm	XBridge Amide 130 Å, 2.5 µm
2.1 x 5 mm	186009842	186009864	186009878	186009853	186009913	186009927
3.9 x 5 mm	186009846	186009871	186009885	186009857	186009920	186009934

## Premier 2.5 µm Application-Specific Columns

	2.1 x 50 mm	2.1 x 100 mm	2.1 x 150 mm
XBridge Peptide BEH C <sub>18</sub> , 130 Å, 2.5 µm	186009733	186009734	186009835
XBridge Peptide BEH C <sub>18</sub> , 300 Å, 2.5 µm	186009892*	186009893*	186009894*
XSelect Peptide CSH C <sub>18</sub> , 130 Å, 2.5 µm	186009904	186009905	186009906
XSelect Peptide HSS T3, 100 Å, 2.5 µm	186009839	186009840	186009841

	4.6 x 50 mm	4.6 x 100 mm	4.6 x 150 mm
XBridge Peptide BEH C <sub>18</sub> , 130 Å, 2.5 µm	186009898	186009899	186009900
XBridge Peptide BEH C <sub>18</sub> , 300 Å, 2.5 µm	186009895*	186009896*	186009897*
XSelect Peptide CSH C <sub>18</sub> , 130 Å, 2.5 µm	186009907	186009908	186009909
XSelect Peptide HSS T3, 100 Å, 2.5 µm	186009910	186009911	186009912

	2.1 x 50 mm	2.1 x 100 mm	2.1 x 150 mm
XBridge Oligonucleotide BEH C <sub>18</sub> , 130 Å, 2.5 µm	186009836	186009837	186009838

	4.6 x 50 mm	4.6 x 100 mm	4.6 x 150 mm
XBridge Oligonucleotide BEH C <sub>18</sub> , 130 Å, 2.5 µm	186009901	186009902	186009903

\*XBridge Peptide BEH 300Å色谱柱(PN 186009892, 186009893, 186009894, 186009895, 186009896, 186009897)大孔径可用于寡核苷酸的分析。





为保护您的设备，请选择与色谱柱相匹配的VanGuard™ FIT保护柱。FIT保护柱独特的设计，能保证分离效率的要求并延长色谱柱寿命



## 应用文献列表

使用结合MaxPeak HPS技术的ACQUITY Premier在无需钝化液相色谱系统的情况下回收磷酸化肽	磷酸肽	720006921ZH
利用ACQUITY Premier系统和色谱柱改善寡核苷酸生物分析的色谱性能	Oligo	720007119ZH
在LC-MS研究中利用MaxPeak高性能表面技术大幅提高磷酸肽的回收率	磷酸肽	720007025ZH
使用ACQUITY Premier系统解决方案改善人血浆中三羧酸(TCA)循环分析物定量分析的灵敏度和色谱峰形	TCA	720007107ZH
ACQUITY Premier液相色谱技术显著改善磷酸化和羧化脂质的灵敏度、峰形和回收率	磷酸化和羧化脂质	720007092ZH
利用MaxPeak高性能表面技术提高LCMS/MS方法分析B族维生素的性能	B族维生素	720007117ZH
使用Premier标准品研究色谱表面的惰性	Premier标准品	720007105ZH
采用配备MaxPeak HPS技术的ACQUITY Premier系统和色谱柱进行吉非替尼（一种EGFR抑制剂）生物分析的优势	吉非替尼	720007122ZH
MaxPeak高性能表面(HPS)技术在改善灵敏度和动态范围方面的表现：关于核苷酸检测的案例研究	核苷酸	720007053ZH
使用ACQUITY Premier和MaxPeak HPS色谱柱改善磷酸类固醇药物定量分析的灵敏度	甾体磷酸酯	720007095ZH
使用ACQUITY Premier和有机杂化表面技术改善生物体液中的药物代谢物鉴定：提高灵敏度和重现性	吉非替尼代谢物	720007048ZH

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