Vydac® Media

300Å RP Protein Purification Pioneer

Pioneered by Grace and produced by a unique process based on purified oranosilicate starting materials, Vydac® silicas are well defined, high purity, totally porous separation media that meet the most demanding needs of preparative and process scale users. Proven in over two decades of applications for protein, peptide, and nucleic acid separations, Vydac® 300Å reversed-phase media have excellent selectivity and reproducibility. Bulk Vydac® adsorbents incorporate bonded phase chemistries identical to those in Vydac® brand analytical and prep HPLC columns, thereby assuring economical method development and reliable, dependable scale-up for preparative and process chromatographic applications.

Vydac® TP 300A Silica Specifications	
Pore Size:	300Å
Pore Volume:	0.6mL/g
Surface Area:	90m²/g
Particle Shape:	Spheroidal

Vydac® 300Å Media

	MS			TP					
Bonded Chemistry	Butylsilane C4 214MS	Octylsilane C8 208MS	Octadecylsilane C18 218MS	Butylsilane C4 214TP	Octylsilane C8 208TP	Octadecylsilane C18 218TP	Octadecylsilane C18 monomeric 238TP	Diphenylsilane 219TP	Silica 101TP
10–15µm Particles	**214MSB1015**	**208MSB1015**	**218MSB1015**	**214TPB1015**	**208TPB1015**	**218TPB1015**	**238TPB1015**	**219TPB1015**	**101TPB1015**
15–20µm Particles	**214MSB1520**	**208MSB1520**	**218MSB1520**	**214TPB1520**	**208TPB1520**	**218TPB1520**	**238TPB1520**	**219TPB1520**	**101TPB1520**
20–30µm Particles	**214MSB2030**	**208MSB2030**	**218MSB2030**	**214TPB2030**	**208TPB2030**	**218TPB2030**	**238TPB2030**	**219TPB2030**	**101TPB2030**

Available in 10g increments.

tech tip

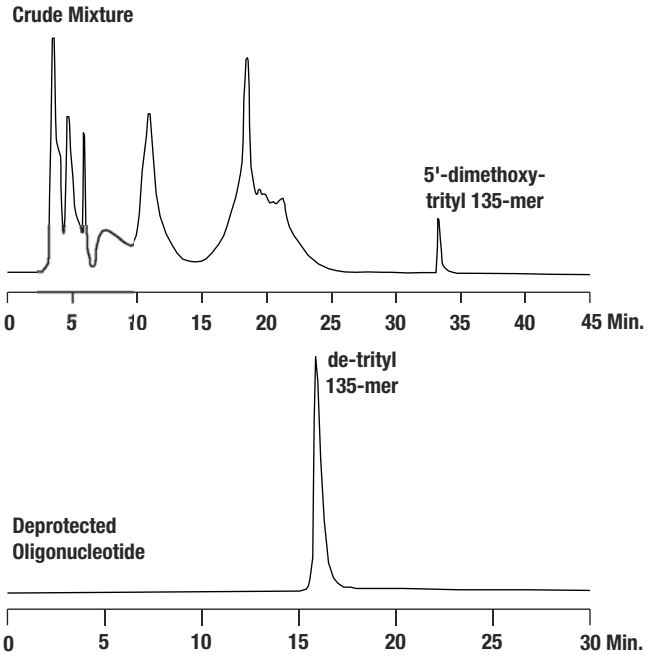
Vydac® MS vs. Vydac® TP

Both phases are based on the same high purity 300Å silica. However, MS undergoes an additional treatment prior to bonding that reduces the residual polar activity of the silica surface. For many applications this results in improved resolution and an increase in recovery.

Two-Stage Purification of a Synthetic 135-mer

Although generally recommended for oligonucleotides up to 75 bases, Vydac® 214TP columns have been used to purify much longer synthetic oligonucleotides. Here a 135-mer is purified by two stages of chromatography on a 214TP column—the first with the 5'-dimethoxytrityl protecting group still attached, causing strong retention, and the second after removal of the trityl group.

Column: Vydac® **214TP1010** C4, 10µm,10 x 250mm
Flow Rate: 5mL/min
Mobile Phase: **A:** 0.1 M Triethylammonium Acetate, pH 7.0
B: Acetonitrile
Gradient: **Crude:** 0 to 60% **B** from 5 to 40min
Deprotected: 0 to 20% **B** from 5 to 25min
Detector: UV at 260nm



Data courtesy of Joseph Kosmoski and Dr. Michael Smerdon, Dept. of Biochemistry and Biophysics, Washington State University, Pullman, WA, USA