

# New! Vydac® 150HC Peptide Media

purification technologies

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Product Information Sheet

- High Capacity Media for Peptide Purification
- 2-3X Greater Loading Capacity than Leading Material
- Improved Resolution and Purity
- Developed Specifically for Process Scale Purification of Peptides
- Intended for Small to Medium-Sized Peptides

### Peptide Therapeutics

There has been a growing trend towards peptides as therapeutic agents in recent years. This has been driven by the many inherent benefits peptides provide over small molecule drugs and recent developments that overcome past limitations in manufacturing and delivery of peptide therapeutics.

The failure of combinatorial processes to successfully deliver viable small molecule drug candidates has renewed interest and exploration of biologic therapeutic targets. In addition, peptides often have higher potency and higher efficacy on the desired target, minimal side effects and interactions, offer greater biological and chemical diversity, and have reduced number of side effects.

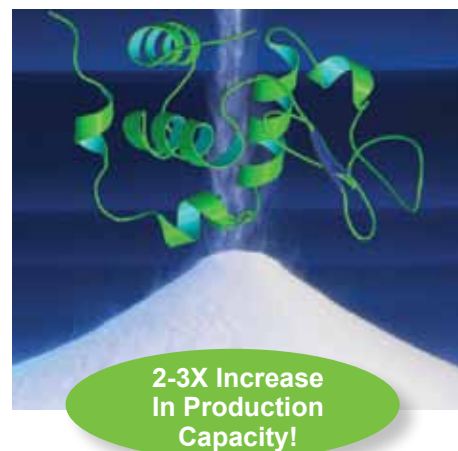
Recent advances in peptide synthesis technologies have enabled manufacturing of complex peptides on a very large scale. New formulation and delivery strategies have opened the possibilities of oral delivery of protein and peptide drugs.

### Peptide Purification

In peptide synthesis, many side reactions occur that generate impurities. These impurities often are chemically similar to the target peptide and therefore present challenges in isolation of the peptide of interest. The most powerful method for peptide purification is reversed phase chromatography. For industrial purification, important consideration and selection of particle size, pore size, and stationary phase in relation to the peptide can optimize purification. Efficient column packing and use of dynamic axial compression can further improve results.

To address the growing demand for effective peptide purification, Grace has developed the new Vydac® 150HC purification media. Vydac® media has been a trusted name in biopurification for over 30 years. The new Vydac® 150HC media is highly effective at purifying many small to medium-sized peptides with greater loading capacity and improved productivity compared to competitive media (Figure 2). It has unique selectivity that can reveal peaks masked by other C18 media and improves resolution of closely related peptides and impurities for higher purity target peptides (Figure 1).

Bulk Vydac® media incorporates bonded phase chemistries identical to those used in analytical and prep columns, thereby assuring economical method development and reliable scale-up for preparative and process purification. Columns packed with Grace's dynamic axial compression Spring® columns demonstrate greater efficiency and reproducibility with extended column lifetimes. Contact Grace to optimize a purification strategy for your peptide or request a sample of Vydac® 150HC.



### Vydac® 150HC Media Specs

Phase	C18
Pore Size	150Å
Pore Volume:	1.05mL/g
Surface Area:	320m <sup>2</sup> /g
Particle Size	20µm
Carbon Load	16%

### Vydac® 150HC Media Ordering

Part No.:	5149682
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Materials for  
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purification  
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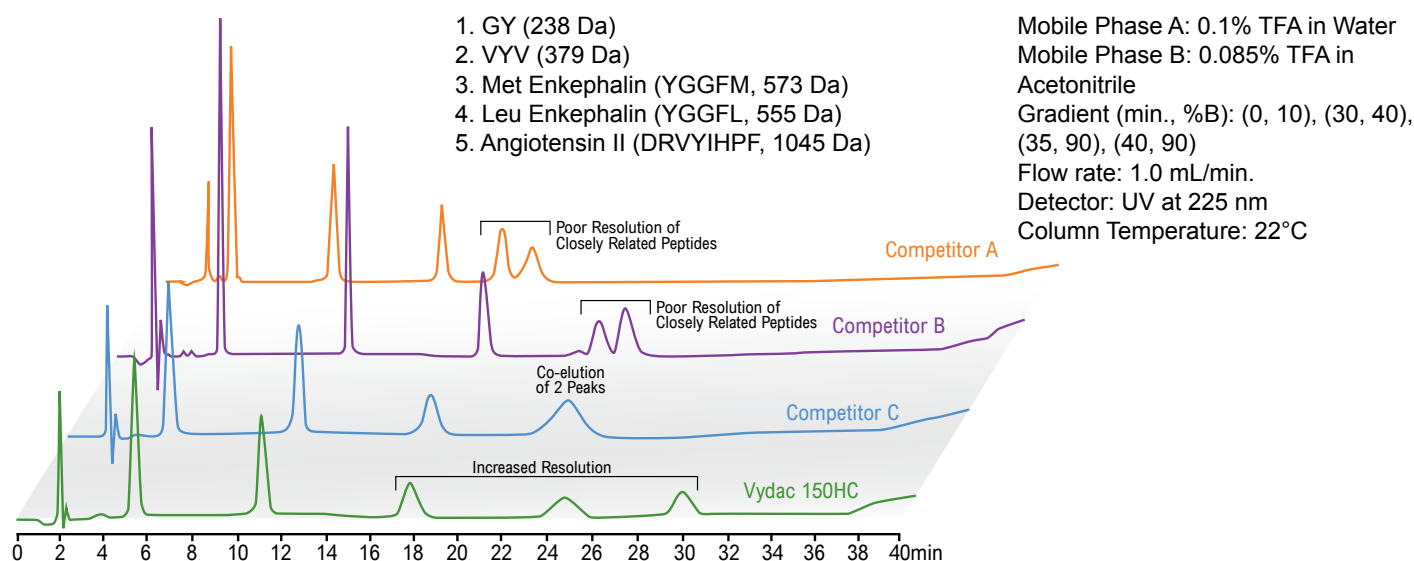


formulation  
and delivery

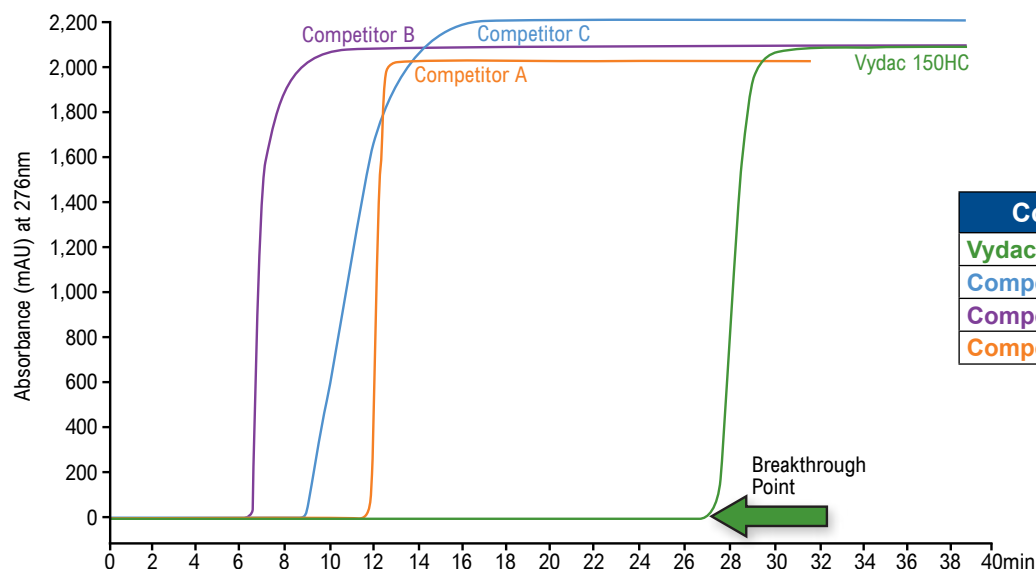
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Materials Technologies

**Figure 1 - Peptide Mix on Different C18 Media, 4.6x150mm**



**Figure 2 - Greater Loading Capacity than Competitive Media**



Column Loading Capacity	
Vydac® 150HC, C18 20µm	31 mg/mL
Competitor C, C18 15µm	11 mg/mL
Competitor B, C18 10µm	7 mg/mL
Competitor A, C18 18µm	13 mg/mL



**Spring® Columns and Multipacker® Packing Station**  
**Are the Perfect Companions for Vydac® Media**  
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