

## **RNA/DNA Columns and HPLC Buffers** **For Scalable Nucleic Acid Separations**

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ADS Biotec is your source for world-class columns and buffers for the scalable separation and purification of RNA and DNA.

### **RNA/DNA Columns**

Our RNASep™ line of columns are comprised of uniform alkylated nonporous polystyrene-divinylbenzene (PS-DVB) copolymer microspheres providing high performance nucleic acid separations. Additionally, these versatile columns can be used with most HPLC\FPLC systems for many RNA and DNA separations.

#### **RNASep™ Prep Column (starter column)**

- ✓ RNA purification for down-stream biological use
- ✓ RNA purity assessment
- ✓ Excellent sensitivity and resolution
- ✓ Useful for HPLC method validation prior to scale-up

**Catalogue Number: RNA-99-3810**  
**7.8 x 50 mm, non-porous PS\DVB resin matrix**  
**Column capacity: ~50 µg total RNA**



*Increased Productivity with High Quality and Consistency*

# RNA/DNA Columns and HPLC Buffers

For Scalable Nucleic Acid Separations



## RNASeq™ Semi-Prep Column

- ✓ RNA purification scale-up for downstream therapeutic/biological use
- ✓ RNA purification for early process development and in vivo studies
- ✓ Compatible with LC based instruments
- ✓ High-loading capacity
- ✓ Ideal for 2-step purifications
- ✓ Automate with fraction collection

**Catalogue Number: RPC-99-2110**  
**21.2 x 100 mm, non-porous PS\DVB resin matrix**  
**Column capacity: ~600 µg total RNA**



## RNASeq™ Semi-Prep II Column

- ✓ RNA purity assessment scale-up for downstream therapeutic/biological use
- ✓ High-loading capacity
- ✓ Ideal for 2-step purifications
- ✓ Automate with fraction collection

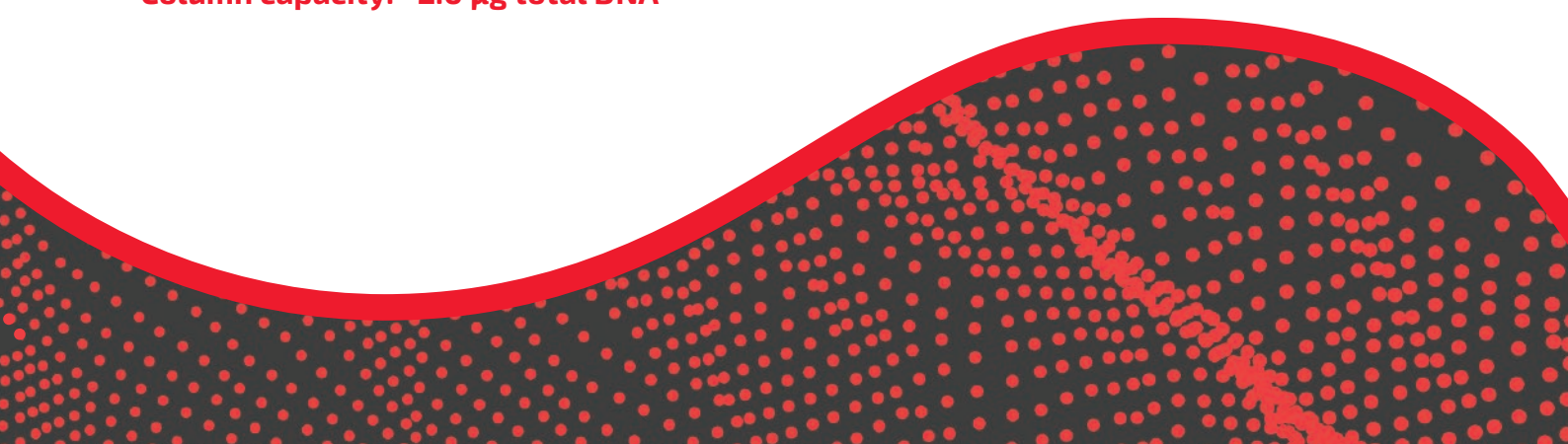
**Catalogue Number: RCP-99-3015**  
**30.0 x 150 mm, non-porous PS\DVB resin matrix**  
**Column capacity: up to 2 mg total RNA**



## DNA Purification Column

- ✓ DNA and Oligo purity assessment
- ✓ Superior DNA sizing
- ✓ Excellent sensitivity and resolution
- ✓ Robust, long lifetime
- ✓ Hundreds of dHPLC literature references

**Catalogue Number: DNA-99-3510**  
**4.6 x 50 mm, non-porous PS\DVB resin matrix**  
**Column capacity: ~2.0 µg total DNA**



# RNA/DNA Columns & HPLC Buffers

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## HPLC Buffers

Consistent, high-quality buffers are of paramount importance for RNA purification to ensure their efficacy for downstream application and therapeutic use. Separation and purification of nucleic acids is most commonly performed using ion-paired reversed phase chromatography. This technique provides ionic interaction between the nucleic acid and the stationary phase via its hydrophobic moiety.

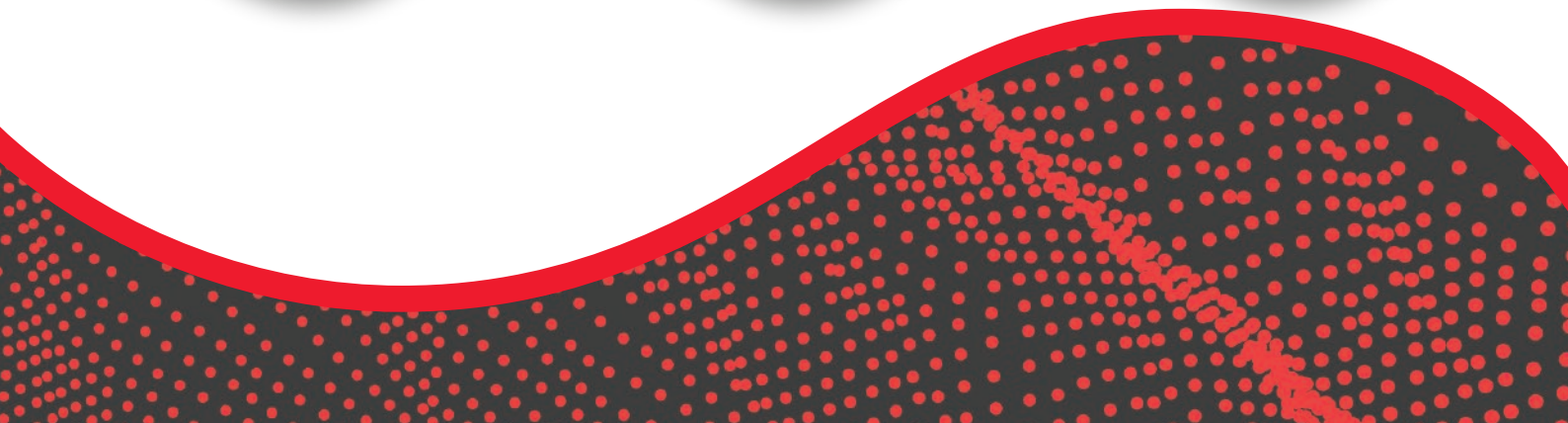
ADS Biotec has over 20 years of experience producing the highest quality HPLC buffers available for nucleic acid separations. In parallel with traditional HPLC needs, our buffers are now in high demand for process development and clinical lot productions in large scale batches (nominally 400-900 liters). Undergoing rigorous quality testing prior to manufacture, we ensure our buffers have clean baselines, optimal resolution, and separation consistency.

We offer two types of ion-pairing HPLC buffers:

- ✓ **Triethylammonium acetate (TEAA)** suitable for common nucleic acid separations.
- ✓ **Hexylammonium acetate (HAA)** for challenging separations. Developed for superior resolution of sequence independent molecules; capable of resolving molecules of identical length but differing in sequence (weight).

## Custom Buffer Manufacture

Contact us for your custom needs for mobile phase manufacturing of ready-to-use buffer solutions to be produced within our proven ISO 9001 Quality System. ADS Biotec can provide storage and global drop shipments of custom mobile phases as well. We offer unparalleled mixing precision for aqueous and non-aqueous solutions from single liters to a thousand liters, custom labeled and packaged to meet your requirements. Our flexible manufacturing facility is equipped with dedicated mixing tanks and calibrated equipment in production suites in a controlled, HEPA-filtered clean-room environment.



# RNA/DNA Columns and HPLC Buffers

## For Scalable Nucleic Acid Separations



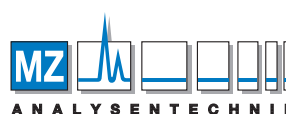
### Column Order Information

Product Description	Use	Column Dimensions	Catalogue Numbers
RNAsep™ Prep Column	Separation, purification and QC of RNA molecules	7.8 x 50 mm	RNA-99-3810
RNAsep™ Semi-Prep Column	RNA purification for intermediate scale-up	21.2 x 100 mm	RPC-99-2110
RNAsep™ Semi-Prep II Column	RNA purification for large scale-up	30.0 x 150 mm	RPC-99-3015
DNAsep™ Column	High resolution ds/ssRNA and DNA analysis High resolution RNA analysis	4.6 x 50 mm	DNA-99-3510

### HPLC Buffer Order Information

Product Description	Size	Catalogue Numbers
Mobile Phase for Nucleic Acid Analysis – Buffer A (0.1 M TEAA in water)	4 x 2.5 L	553421
Mobile Phase for Nucleic Acid Analysis – Buffer B (0.1 M TEAA in 25 % Acetonitrile)	4 x 2.5 L	553422
Column Wash Solution D (75 % acetonitrile)	4 x 2.5 L	553423
Mobile Phase for Nucleic Acid Analysis – Buffer HA A (0.1 M HAA in 10% Acetonitrile)	4 x 2.5 L	553424
Mobile Phase for Nucleic Acid Analysis – Buffer HA B (0.1 M HAA in 50% Acetonitrile)	4 x 2.5 L	553425
2 M TEAA Solution	6 x 200 mL	SP5890
2 M HAA Solution	6 x 200 mL	SP5892
Custom Volume – Mobile Phase for Nucleic Acid Analysis - Buffer A (0.1 M TEAA in water)	*	553421-L
Custom Volume – Mobile Phase for Nucleic Acid Analysis- Buffer B (0.1 M TEAA in 25% Acetonitrile)	*	553422-L
Custom Volume – Column Wash Solution D (75 % Acetonitrile)	*	553423-L
Custom Volume – 2 M TEAA Solution	*	553303-L
Custom Volume – 2 M HAA Solution	*	552303-L

\* Customer specified packing and volume



AUTHORIZED DISTRIBUTOR

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