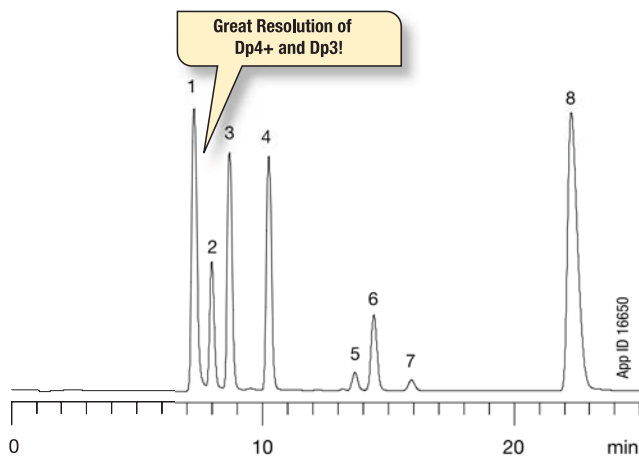


## Bioethanol Fermentation Monitoring

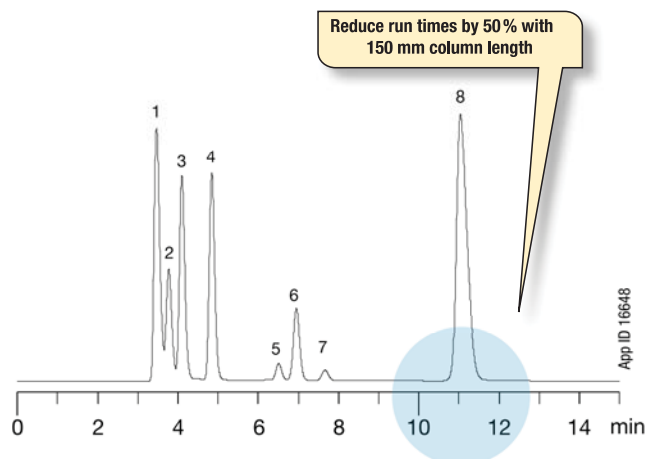
- Easy quantitation of ethanol fermentation broth components
- Monitor starches, sugars, organic acids, and ethanol in one run
- Reliable lactic acid and acetic acid monitoring
- Increase throughput by reducing run times 50 % with 150 mm column length

Monitoring the key reaction components throughout the fermentation process is crucial for maximizing ethanol recovery. Rezex ROA is uniquely suited for the separation and analysis of simple and complex sugars, organic acids, and ethanol within a fermentation broth sample. With results easily obtained through an isocratic run, Rezex ROA is instrumental in helping you to accurately determine what critical steps need to be taken to ensure the maximum yield is achieved during your fermentation run.

Rezex ROA has the ability to achieve excellent baseline separation between Dp3 and Dp4+, which have proven to be a challenge within the bioethanol industry. It is this great baseline separation that affords scientists the opportunity to utilize a shorter column dimension. By using the 150 x 7.8 mm Rezex ROA column, you are able to decrease the run time by 50 % when compared to the average run time on a 300 x 7.8 mm column.



**Column:** Rezex ROA-Organic Acid  
**Dimensions:** 300 x 7.8 mm  
**Part No.:** 00H-0138-K0  
**Mobile Phase:** 0.005 N Sulfuric Acid  
**Flow Rate:** 0.6 mL/min  
**Detection:** RI @ 40 °C  
**Temperature:** 60 °C  
**System:** Shimadzu® Prominence® LC-20A System  
**Sample:** 1. Dp4+ 5. Lactic Acid  
 2. Dp3 6. Glycerol  
 3. Maltose 7. Acetic Acid  
 4. Glucose 8. Ethanol



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