

SPESolid Phase
Extraction

Application Note

World Leaders in Sample Preparation

SPE244**ISOLATION OF 11 CIS, 13 CIS, 9 CIS AND ALL
TRANS RETINOL FROM SERUM**

Spe-ed™ Cartridge	Cat. No.2101-Silica Gel, 100mg/1mL; or Cat. No. 2121-ALN Alumina (N), 100mg/1mL; or Cat. No. 2151-DIO Diol, 100mg/1mL.
Sample Preparation	Extract vitamin A isomers from the sample with 99% methanol. Use 2 parts methanol to 1 part sample. Filter evaporate, and re-dissolve in 100uL 1:1 chloroform / methanol. Add 3mLs of hexane.
Cartridge Conditioning	1mL hexane. DO NOT ALLOW CARTRIDGE TO RUN DRY!
Sample Addition	Add prepared sample to cartridge. Aspirate slowly through cartridge.
Cartridge Wash	1mL hexane.
Analyte Elution	1ml of 2% dioxane/ hexane (retinyl esters)
Second Elution	2mL of 15% dioxane/ hexane (retinal isomers). Evaporate second fraction under N ₂ and re-dissolve in 1mL methanol.

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