

# SPE

Solid Phase  
Extraction

# Application Note

World Leaders in Sample Preparation

## SPE149

## ISOLATION CARBAMAZEPINE FROM SERUM FOR GC

<b>Spe-ed™ Cartridge</b>	Cat. No. 12001-Octadecyl C18/18%, 100mg/1mL. Process with <i>Spe-ed Mate</i> .
<b>Cartridge Conditioning</b>	2 x 1mL methanol 2 x 1mL of distilled water <b>DO NOT ALLOW CARTRIDGE TO RUN DRY!</b>
<b>Sample Addition</b>	Add 500uL serum, and 500uL internal standards, 500ug/mL of 4-methylprimidone in pH 4.0-citrate buffer.
<b>Cartridge Wash</b>	2 x 1mL distilled water.
<b>Analyte Elution</b>	2 x 100uL acetone. Evaporation to dryness under nitrogen, and reconstitute in 75uL of methylene chloride.
<b>CG Conditions</b>	
<b>Column</b>	2% SP-2110 / 1% SP-2510, 3fx 2mm
<b>Mobile Phase</b>	215°C – 255°C. @ 6°C. / Minute.
<b>Flow</b>	35mL / minute
<b>Detector</b>	FID (275°C.)
<b>Injection</b>	3uL

**Note:** *Since sample matrix interferences and concentrations may vary from sample to sample, it may be necessary to adjust the wash and elution solvent/solution strength and/or volume to optimize isolation.*

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