

# SPE

Solid Phase  
Extraction

# Application Note

World Leaders in Sample Preparation

## SPE146

## ISOLATION OF PROPRANOLOL FROM PLASMA

<b>Spe-ed™ Cartridge</b>	Cat. No. 2003- Octadecyl C18/14%, 500mg/3mL. Process with <i>Spe-ed Mate</i> .
<b>Sample Preparation</b>	<b>(For Total Propranolol)</b> Adjust 1mL of plasma sample to pH of 7.0 and add internal standards to give a concentration of 100ug/L. <b>(For Free Propranolol)</b> Ultrafilter plasma sample until 1mL of filtrate is collected. Free propranolol is in filtrate.
<b>Cartridge Conditioning</b>	5mL distilled water 2mL methanol 2mL deionized water <b>DO NOT ALLOW CARTRIDGE TO RUN DRY!</b>
<b>Sample Addition</b>	Aspirate 1mL of prepared sample through the cartridge.
<b>Cartridge Wash</b>	5mL of deionized water
<b>Analyte Elution</b>	2mL of methanol. Collect eluate.
<b>Evaporation</b>	Evaporate in a water bath set at 50°C, under a constant air flow and dissolve the residue in 100uL of methanol. Inject the solution onto the chromatographic column.
<b>HPLC Analysis Column</b>	C18, 5um
<b>Mobile Phase</b>	Methanol: 50mmol/L KH <sub>2</sub> PO <sub>4</sub> and 2.5
<b>Flow Rate</b>	MmL/L sodium 1-pentane sulfonic acid pH 5.05 1:11 2mL / minute.
<b>Detection</b>	Spectrofluorometer Quartz flow cell, excitation 269nm and Emission set at 338nm

**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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