

# PPLICATIONS

## A Faster Solid Phase Extraction Method for Pain Relievers from Plasma Using Strata®-X PRO

**Matthew Brusius** Phenomenex, Inc., 411 Madrid Ave., Torrance, CA 90501 USA

### **Overview**

While traditional solid phase extraction (SPE) methods usually include five or more steps, implementing Strata-X PRO offers a fast and effective alternative that provides high recoveries and reduces matrix effects. Strata-X PRO uses a 3-step method, eliminating the conditioning and equilibration steps, yet still yields high recovery and removes phospholipids, equivalently to Waters® Oasis® PRIME HLB SPE. This application displays that for a range of pain relievers, an easy SPE method can be implemented and produce acceptable results.

### **SPE Protocol**

96-Well Plates: Strata-X PRO, 30 mg/well

Waters Oasis PRiME, 30 mg/well

Part No.: 8E-S536-TGB

Load: 500 µL Plasma/0.1% Formic acid

in Water (1:1)

Wash: 1 mL 5% Methanol in Water

Dry: 1 minute at 5" Hg

Elute: 1 mL 0.1% Formic acid in

Acetonitrile/Methanol (90:10)

Dry Down: 1 minute at 5" Hg

Figure 1. Recoveries of Analytes From Plasma for Strata-X PRO and Waters Oasis PRIME

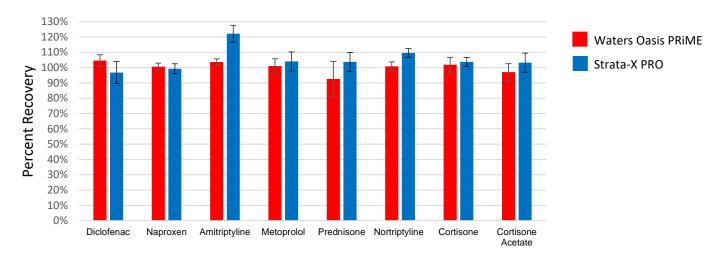
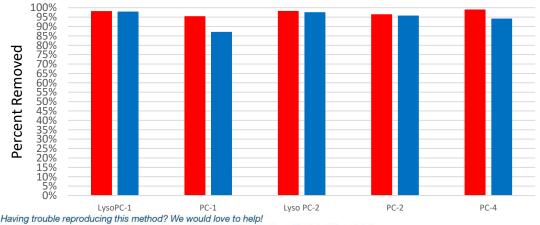


Figure 2. Comparison of Removal of Phospholipids from Plasma



Lvso 1: 1-Palmitovl-2-OH-sn-glycerophosphocholine, (16:0)

Lvso 2: 1-Oleovl-2-OH-sn-glycerophosphocholine, (18:1) m

PC 1: 1-Palmitoyl-2-Oleoyl-sn-glycerolphosphocholine, (16:0, 18:1)

PC 2: 1-Stearoyl-2-Lindoleoyl-sn-glycerolphosphocholine, (18:0, 18:2)

PC 4: 1- Oleoyl-2-Lindoleoyl-sn-glycerolphosphocholine, (18:1, 18:2)

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t: +61 (0)2-9428-6444 auinfo@phenomenex.com

t: +43 (0)1-319-1301 anfrage@phenomenex.com

### **Belgium**

t: +32 (0)2 503 4015 (French) t: +32 (0)2 511 8666 (Dutch) beinfo@phenomenex.com

Canada t: +1 (800) 543-3681 info@phenomenex.com

t: +86 400-606-8099 cninfo@phenomenex.com

### Denmark

t: +45 4824 8048 nordicinfo@phenomenex.com

### Finland

t: +358 (0)9 4789 0063 nordicinfo@phenomenex.com

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t: +33 (0)1 30 09 21 10 franceinfo@phenomenex.com

**Germany** t: +49 (0)6021-58830-0 anfrage@phenomenex.com

### India

t: +91 (0)40-3012 2400 indiainfo@phenomenex.com

t: +353 (0)1 247 5405 eireinfo@phenomenex.com

Italy t: +39 051 6327511 italiainfo@phenomenex.com

Luxembourg t: +31 (0)30-2418700 nlinfo@phenomenex.com

### Mexico

t: 01-800-844-5226 tecnicomx@phenomenex.com

### The Netherlands

t: +31 (0)30-2418700 nlinfo@phenomenex.com

New Zealand t: +64 (0)9-4780951 nzinfo@phenomenex.com

**Norway** t: +47 810 02 005 nordicinfo@phenomenex.com

Portugal t: +351 221 450 488 ptinfo@phenomenex.com

**Singapore** t: +65 800-852-3944 sginfo@phenomenex.com

**Spain** t: +34 91-413-8613 espinfo@phenomenex.com

**Sweden** t: +46 (0)8 611 6950 nordicinfo@phenomenex.com

### Switzerland

t: +41 (0)61 692 20 20 swissinfo@phenomenex.com

### Taiwan

t: +886 (0) 0801-49-1246 twinfo@phenomenex.com

### United Kingdom

t: +44 (0)1625-501367 ukinfo@phenomenex.com

t: +1 (310) 212-0555 info@phenomenex.com

## All other countries Corporate Office USA

t: +1 (310) 212-0555 info@phenomenex.com

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