

### Sample Preparation

600  $\mu\text{L}$  sample solution mixed with 200  $\mu\text{L}$  serum and 400  $\mu\text{L}$  10 mM potassium phosphate buffer solution (pH 7.0).

Centrifugation  
Speed : 2,300 x g



**Centrifuge**

30 sec

#### 1. Conditioning

Add 300  $\mu\text{L}$  methanol  
↓ Centrifuge  
Add 300  $\mu\text{L}$  10 mM potassium phosphate (pH 7.0)



**Centrifuge**

2 mins

#### 2. Adsorption

Add 600  $\mu\text{L}$  sample solution



**Centrifuge**

1 min

#### 3. Rinsing

Add 300  $\mu\text{L}$  water

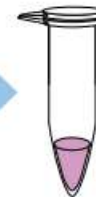


**Centrifuge**

1 min

#### 4. Elution

Add 200  $\mu\text{L}$  acetonitrile



**Purified Sample**

## Reproducibility study for drugs in serum sample for three days using MonoSpin C18 (n=10)

**MonoSpin demonstrated high reproducibility for purification of drugs.**

Sample	Con.	Rec.	RSD
Desipramine	5 ng/mL	91.2 %	4.8 %
	10 ng/mL	86.1 %	3.3 %
	50 ng/mL	85.2 %	5.9 %
	250 ng/mL	88.4 %	6.5 %
Imipramine	5 ng/mL	96.3 %	9.5 %
	10 ng/mL	95.8 %	1.5 %
	50 ng/mL	94.5 %	0.9 %
	250 ng/mL	95.9 %	0.9 %
Fluvoxamine	5 ng/mL	96.8 %	11.6 %
	10 ng/mL	87.1 %	5.0 %
	50 ng/mL	86.8 %	8.1 %
	250 ng/mL	87.5 %	9.7 %

Sample	Con.	Rec.	RSD
Paroxetine	5 ng/mL	83.7 %	3.9 %
	10 ng/mL	84.1 %	7.8 %
	50 ng/mL	83.9 %	8.2 %
	250 ng/mL	86.7 %	7.5 %
Maprotiline	5 ng/mL	85.7 %	8.1 %
	10 ng/mL	84.7 %	3.2 %
	50 ng/mL	88.6 %	5.4 %
	250 ng/mL	87.5 %	7.7 %
Duloxetine	5 ng/mL	106.3 %	9.9 %
	10 ng/mL	104.8 %	6.7 %
	50 ng/mL	99.8 %	8.7 %
	250 ng/mL	99.8 %	6.0 %

Sample	Con.	Rec.	RSD
Amitriptyline	5 ng/mL	83.7 %	7.0 %
	10 ng/mL	81.8 %	2.8 %
	50 ng/mL	83.8 %	3.0 %
	250 ng/mL	88.4 %	2.7 %
Sulpiride	5 ng/mL	97.9 %	9.0 %
	10 ng/mL	95.5 %	8.5 %
	50 ng/mL	90.8 %	2.6 %
	250 ng/mL	92.6 %	3.0 %