

	<b>Metabolomics Core Lab</b> <b>School of Medicine</b> <b>University of Utah</b>	<b>SOP #</b>	1
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<b>SOP Owner</b>	J Cox	<b>Approval</b>	

## Standard Operating Procedure-Buffer Preparation for LC-MS

### **1. Purpose**

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A uniform method for preparation of LC-MS buffers

### **2. Scope**

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This SOP applies to the preparation of LC-MS buffers for metabolomics analysis

### **3. Prerequisites**

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None

### **4. Responsibilities**

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Dr. James Cox is the primary researcher responsible for this SOP and the procedures involved herein. Dr. Alan Maschek, Tyler Van Ry and Dr. Leon Catrow in this SOP.

### **5. Procedures**

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1. A1=pH 3ish. 20 mM formic acid in water. Add 187.5 uL of formic acid to 250 mL of water. DO NOT TAKE FORMIC STRAIGHT FROM BOTTLE!!! Transfer small amount to a rinsed glass test tube and measure from this.
2. A2=pH 5. This is 5 mM acetic acid with 10 mM ammonium acetate. To make weigh 0.198 g of ammonium acetate, fill to 250 mL of ddH<sub>2</sub>O and add 72.5 uL of acetic acid.
3. B1=pH 6.8. 10 mM ammonium acetate. Add 0.198 g of ammonium acetate, fill to 250 mL of water.
4. B2=pH 8.9. 10 mM ammonium carbonate. Add 0.24 g of ammonium carbonate, fill to 250 mL of water.