

## 斐林试剂

货号: G0110

规格: 2×100mL

保存: 室温, 避光保存, 有效期 6 个月。

### 产品组成:

名称	规格	保存
试剂(A): 斐林试剂A	100mL	室温
试剂(B): 斐林试剂B	100mL	室温

### 产品说明:

斐林试剂又称菲林试剂, 是德国化学家Hermann von Fehling 1849年所发明。菲林试剂与Benedict's Reagent相似, 均是用来检测还原糖的存在。其原理是不可溶性的还原性糖(葡萄糖、果糖和麦芽糖)在加热的条件下, 能够生成砖红色的氧化亚铜沉淀。其颜色变化顺序为: 浅蓝色--棕色--砖红色(沉淀)。

斐林试剂主要由酒石酸钠钾、硫酸铜等组成, 常用于鉴定可溶性的还原性糖, 常用于尿糖的鉴定。仅用于科研用途, 不宜用于临床检测。

### 自备材料:

试管、加热装置

### 操作步骤: (仅供参考)

1. 配制斐林试剂工作液: 临用前, 取适量试剂(A)、试剂(B)等量混合, 即为斐林试剂工作液, 即配即用。
2. 向试管中加入2ml待测样品。
3. 向试管中加入1ml 斐林试剂工作液, 充分摇匀。
4. 把上述混合液置于50~65℃水浴中, 并持续2~3min。
5. 观察试管内混合液颜色是否发生变化。其颜色变化顺序应为浅蓝色--棕色--砖红色(沉淀)。

### 染色结果:

还原性糖(如核糖、葡萄糖、果糖等)	砖红色沉淀
非还原性糖(蔗糖、淀粉等)	无颜色变化

### 注意事项:

1. 如是糖尿病人, 检验前两天最好停止服药。
2. 本试剂仅用于科研用途, 不宜用于临床检测。
3. 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

## Fehling's Stain Kit

**Cat:** G0110

**Size:** 2 × 100mL

**Storage:** RT, avoid light, valid for 6 months.

### Kit components

Reagent	2 × 100mL	Storage
Reagent(A): Fehling's Solution A	100mL	RT
Reagent(B): Fehling's Solution B	100mL	RT

### Introduction

Fehling's Solution, was invented by German chemist Hermann von Fehling in 1849. Similar to Benedict's reagent, Fehling's Solution is used to detect the presence of reducing sugar. The principle is that the insoluble reducing sugars (glucose, fructose and maltose) can produce brick red cuprous oxide precipitation under the condition of heating. The color change order is: light blue - Brown - brick red (precipitation).

Fehling's Solution is mainly composed of sodium potassium tartrate and copper sulfate. It is often used to identify soluble reducing sugar and urine sugar. It is only used for scientific research and should not be used for clinical testing.

### Self Provided Materials

Test tube and heating device

### Protocols(for reference only)

1. Preparation of Fehling's Working Solution: before use, mix Reagent(A) and Reagent(B) in equal amount to prepare Fehling's Working Solution, which is best to be used immediately.
2. Add 2ml sample to the test tube.
3. Add 1ml Fehling's Working Solution to the test tube and shake well.
4. Place the above mixture in a water bath at 50-5 °C for 2-3min.
5. Observe whether the color of the mixture in the test tube changes. The color change order shall be light blue - brown - brick red (precipitation).

### Result

Reducing sugars (such as ribose, glucose, fructose, etc.)	Brick red precipitation
Non reducing sugar (sucrose, starch, etc.)	No color change

### Note

1. For those with diabetes, it is best to stop taking oral medicine two or three days before the test.
2. This reagent is only used for scientific research and is not suitable for clinical detection.
3. For your safety and health, please wear experimental clothes and disposable gloves.