

## 真菌荧光染色试剂盒(CFW 法)

货号: G3235

规格: 2×50mL

保存: -20℃, 避光保存, 有效期 1 年。

### 产品组成:

名称	2×50mL	保存
试剂 (A): CFW 染色液	50mL	-20℃, 避光
试剂 (B): CFW 稀释液	50mL	2-8℃
临用前, 等量混合试剂 (A) 和试剂 (B) 配制 CFW 工作液, 不宜提前配制。		

### 产品介绍:

钙荧光白 (Calcofluor white; CFW) 是一种非特异性荧光增亮染料, 可以结合 $\beta$ -链接的糖苷 (glucosides) 发出荧光, 如纤维素 (cellulose) 和壳多糖 (chitin) 等。在植物生物学中, 钙荧光白用于显示藻类和高等植物中细胞壁生物合成过程中细胞壁的生成变化, 以及原生质体细胞的鉴定。

真菌荧光染色试剂盒(CFW 法)由 CFW 染色液和 CFW 稀释液组成, 可用于真菌样本的快速检测。CFW 染色液是一种含有荧光素和抑制背景荧光着色试剂的复合溶液。如果待测标本中含有真菌, 荧光素将与非特异真菌细胞壁上的 $\beta$ -多糖结合, 如几丁质和纤维素等, 在 UV 激发光下可产生蓝色荧光。CFW 稀释液可用于溶解角质, 有助于更清晰的观察真菌结构。

### 操作步骤: (仅供参考)

- 挑取待测样本至玻片上, 均匀涂开, 自然晾干。
- 向样本上滴加 20ul-50ul 配制好的 CFW 工作液 (注意避光), 然后盖上盖玻片避光染色 0.5-1min (必要时去除多余染液)。
- 不用清洗直接在荧光显微镜下观察, 激发波长 355nm, 散发波长 440nm。

### 染色结果:

真菌	蓝色荧光
背景	无色或淡蓝色

### 注意事项:

- CFW 工作液染色后无需清洗, 清洗后荧光效果会大大减弱。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。





## Fungal Fluorescence Stain Kit (CFW Method)

**Cat:** G3235

**Size:** 2×50mL

**Storage:** -20°C, avoid light, valid for 1 year.

### Kit Components

Reagent	2×50mL	Storage
Reagent(A): CFW Staining Solution	50mL	-20°C, avoid light
Reagent(B): CFW Dilution Solution	50mL	2-8°C
Before use, mix an equal amount of Reagent(A) and Reagent(B) to prepare CFW Working Solution, and it is not advisable to prepare it in advance.		

### Introduction

Calcium fluorescent white (CFW) is a non-specific fluorescent brightening dye that can bind  $\beta$ -glycosides emit fluorescence, such as cellulose and chitosan. In plant biology, calcium fluorescent white is used to display the changes in cell wall formation during cell wall biosynthesis in algae and higher plants, as well as to identify protoplast cells.

The Fungal Fluorescence Stain Kit (CFW Method) consists of CFW Staining Solution and CFW Dilution Solution, and can be used for rapid detection of fungal samples. CFW Staining Solution is a composite solution containing fluorescein and background fluorescent staining reagents. If the test specimen contains fungi, fluorescein will react with non specific fungal cell walls  $\beta$ - Polysaccharide binding, such as chitin and cellulose, can produce blue fluorescence under UV excitation. CFW Dilution Solution can be used to dissolve keratin, which helps to observe fungal structure more clearly.

### Protocol (for reference only)

1. Take the sample to be tested onto a glass slide, apply it evenly, and let it air dry naturally.
2. Drip 20ul-50ul of prepared CFW Working Solution onto the sample (avoid light), then cover it with a cover glass and stain for 0.5-1 minutes in the dark (remove excess dye if necessary).
3. Observe directly under a fluorescence microscope without cleaning, with an excitation wavelength of 355nm and an emission wavelength of 440nm.

### Result

Fungi	Blue
Background	No color or Light blue

### Note

1. After dyeing with CFW Working Solution, there is no need to clean it, and the fluorescence effect will be greatly reduced after cleaning.
2. For your safety and health, please wear laboratory clothes and disposable gloves when operating.

