

AO/EB 双荧光染色试剂盒

产品简介:

细胞凋亡(Apoptosis)的检测方法有形态学、生物化学、DNA 片段化检测方法以及 TUNEL 等标记片段化 DNA 方法,但从细胞凋亡概念产生的历史及准确性方面考虑,使用显微镜进行的形态学观察也是很重要的;细胞死亡的检测可以通过荧光色素染色区分活细胞、死细胞,测定细胞代谢活性和形态学观察,这些方法都是利用细胞凋亡这种情况进行测定的,因而不一定反映实际情况。

吖啶橙(Acridine Orange, AO)属于三环杂芳香染料,能透过胞膜完整的细胞,嵌入细胞核 DNA,与双链 DNA 结合后发出绿色荧光,荧光发射峰为 530nm;溴化乙锭(Ethidium Bromide, EB)仅能透过胞膜受损的细胞,嵌入核 DNA 发出橘红色荧光,荧光发射峰为 610nm。染色后,凋亡细胞呈染色增强,荧光更为明亮,均匀一致的圆状或固缩状、团块状结构;非凋亡细胞核呈荧光深浅不一的结构样特征;二者很容易判别。在荧光显微镜下观察,可见四种细胞形态:活细胞(VN),核染色质着绿色并呈正常结构;早期凋亡细胞(VA),核染色质着绿色呈固缩状或圆珠状;晚期凋亡细胞(NVA),核染色质为橘红色并呈固缩状或圆珠状;非凋亡的死亡细胞(NVN),核染色质着橘红色并呈正常结构。本产品仅用于科研,不宜用于临床诊断或其他用途。

产品组成:

名称 \ 编号	DA0039 100T	Storage
试剂(A): AO Solution	200μl	4°C 避光
试剂(B): EB Solution	200μl	4°C 避光
试剂(C): AO/EB Dilution Buffer	50ml	4°C
使用说明书	1 份	

自备材料:

- 1、荧光显微镜、低速离心机、细胞计数板、载玻片、盖玻片
- 2、PBS

操作步骤(仅供参考):

- 1、收集细胞,用 PBS 清洗细胞 1 次,加入适量的 PBS 重悬细胞,计数并调节细胞浓度至 $(0.2\sim5)\times10^6/\text{ml}$ 。
- 2、配制 AO/EB 工作液:取适量的试剂(A)、试剂(B)、试剂(C),按照试剂(A):试剂(B):试

剂(C)=1: 1: 8 的比例稀配制成 AO/EB 工作液。

- 3、每 25~50 μ l 细胞悬液中加入 AO/EB 工作液 2 μ l，混合均匀，室温孵育 5~15min。
- 4、取洁净载玻片，滴加上 5~10 μ l 细胞悬液，轻轻盖上盖玻片。
- 5、在荧光显微镜下进行观察。

染色结果:

活细胞	绿色荧光
死细胞	橙色荧光

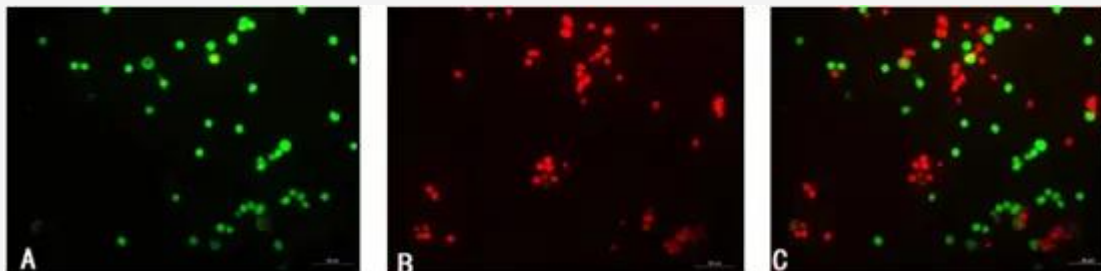
注意事项:

- 1、用能通过活细胞膜与 DNA 结合后发蓝色荧光的 Hoechst33342 和只能通过死细胞与 DNA 结合后发红色荧光的 Propidium Iodide 对细胞进行双染的方法也比较常用。
- 2、如有低温离心机进行离心效果更佳。
- 3、操作过程中应注意减少试剂(A)、试剂(B)暴露于强光下的时间。
- 4、EB Solution 有一定毒性，请小心操作。
- 5、试剂开封后请尽快使用，以防影响后续实验效果。
- 6、为了您的安全和健康，请穿实验服并戴一次性手套操作。

有效期: 12 个月有效；低温运输，4℃保存。

相关产品:

产品编号	产品名称
CC0007	磷酸缓冲盐溶液(10 $\times$ PBS,无钙镁)
DA0001	DAPI 染色液(5ug/ml)
DA0020	Hoechst33342/PI 细胞凋亡染色试剂盒
DA0065	台盼蓝染色液(0.4%)
DC0032	Masson 三色染色液
IH0252	荧光封片剂
NH0043	SSC 缓冲液(20 $\times$,pH7.0)
TC0699	植物总糖和还原糖检测试剂盒(DNS 比色法)



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