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| **Alamar Blue Cell Viability Assay Kit**  **Alamar Blue细胞活力检测试剂盒 Cat.MG3561** |

**Catalog Number :** MG3561

**Packaging Size :** 500 / 1000 rxns

**产品说明**

AlamarBlue检测试剂为细胞增殖和细胞毒性检测提供了一种简便、快速、可靠、安全的方法，适用于高通量检测实验。该检测试剂的主要成分是一种氧化还原指示剂。其在氧化状态下呈现紫蓝色无荧光性，而在还原状态下，转变为呈粉红或红色荧光的还原产物，吸收峰为530-560nm，而散射峰为590nm。在细胞增殖过程中，细胞内NADPH/NADP、FADH/FAD、FMNH/FMN和NADH/NAD的比值升高，处于还原环境。摄入细胞内的染料被这些代谢中间体及细胞色素类还原后释放到细胞外并溶于培养基中，使培养基从无荧光的靛青蓝变成有荧光的粉红色。最后用普通分光光度计或荧光光度计进行检测，吸光度和荧光强度与活性细胞数成正比。

**操作说明**

1. 在100ul细胞悬液中加入10ul的检测试剂，在细胞培养箱内孵育2-6小时，培养基的颜色由靛青蓝开始变成粉红色就可以进入下一步。

2. 推荐使用荧光酶标仪进行检测，激发光波长在530-560nm之间，发射光波长为590nm，记录相对荧光单位(RFU)。

3. 绘制标准曲线或细胞生长曲线：纵座标(Y轴)为相对荧光单位(RFU)；横坐标(X轴)为细胞数或时间点或药物浓度。

**注意事项**

1. 合适密度的细胞可以增加检测灵敏度。对于96孔板，我们建议每孔接种100ul细胞，细胞浓度范围为：贴壁细胞在100-10,000/孔，悬浮细胞在2,000-50,000/孔，并以培养基为空白对照。对于384孔板，细胞浓度和接种量均减半。

2. 整个过程均应为无菌操作，因为微生物污染物同样可以还原检测试剂而影响实验结果。

3. 注意接种细胞浓度和加入检测试剂后孵育时间。细胞浓度过高或孵育时间过长，会导致继发性还原反应，产生无色和荧光消失。

4. 孵育时，须避光。

5. 本产品可以使用荧光或分光光度检测，但荧光的灵敏度高，实验误差小，推荐使用荧光检测。

**保存条件**

2-8ºC，避光保存，有效期一年。

**Introduction**

Cell health can be monitored by numerous methods. Plasma membrane integrity, DNA synthesis, DNA content, enzyme activity, presence of ATP, and cellular reducing conditions are known indicators of cell viability and cell death. alamarBlue® cell viability reagent functions as a cell health indicator by using the reducing power of living cells to quantitatively measure the proliferation of various human and animal cell lines, bacteria, plant, and fungi allowing you to establish relative cytotoxicity of agents within various chemical classes. When cells are alive they maintain a reducing environment within the cytosol of the cell. Resazurin, the active ingredient of alamarBlue® reagent, is a non-toxic, cell permeable compound that is blue in color and virtually non-fluorescent. Upon entering cells, resazurin is reduced to resorufin, a compound that is red in color and highly fluorescent. Viable cells continuously convert resazurin to resorufin, increasing the overall fluorescence and color of the media surrounding cells.

Technical literature is available at: www.mesgenbio.com. E-mail MesGen Technical Services if you have questions on use of this system: [**tech@mesgenbio.com**](mailto:tech@mesgenbio.com)



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