

For Research Use Only. Not For Use In Diagnostic Procedures



Version 2.0

## LIVE/DEAD 细菌活性/细菌毒性试剂盒

### Live-Dead bacterial Cytotoxicity Kit

Do not eat Store at -20° C & in the dark.



Cat.No. MCT8020

Size : 100 / 500 / 1000 tests

Technical literature is available at : [www.mesgenbio.com](http://www.mesgenbio.com)

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

#### Description

Distinguishing between live and dead bacteria is very important for investigation of growth control and bacteria death. The Live-Dead bacterial Cytotoxicity Kit provides the ready-to-use reagents for convenient discrimination between live and dead bacteria. The kit utilizes FDA, a cell-permeable green fluorescent dye (Ex/Em = 494/521 nm), to stain live bacteria. Dead bacteria can be easily stained by propidium iodide (PI), a cell non-permeable red fluorescent dye (Ex/Em = 535/615). Stained live and dead bacteria can be visualized by fluorescence microscopy using a band-pass filter.

#### Kit compose

	100 tests	500 tests	1000 tests
FDA Solution	100μL	500μL	1000μL
PI Solution	200μL	1000μL	2000μL
Bac buffer	20mL	100mL	200mL

#### Procedure

##### Sample Prepare

1. Equilibrate all solutions to room temperature before use. Vortex bacteria suspension, FDA, and PI prior to use.
2. Spin down bacteria and, resuspend the pellet in Bac buffer.  
**Note:** bacteria density in the Bac buffer approximately 10<sup>6</sup>/ml is recommended. Density condition should be optimized.
3. Combine 17 μL of Bacteria sample with 1 μL of FDA and 2 μL of PI.

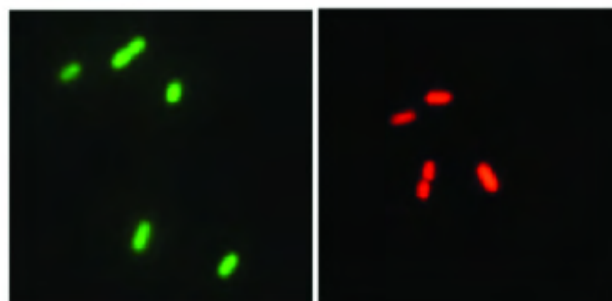
4. Incubate for 15-30 minutes at room temperature in the dark and proceed to sample measurement.

#### Sample Measurement

1. Wash the stained bacteria sample by H<sub>2</sub>O for 2-3 times.
2. Centrifuge the sample, 2000rpm, 1min. Resuspend the pellet by PBS, approximately 10~20μL.
3. Transfer sample solution on the glass slide and cover the glasslip carefully.
4. Stained live and dead bacteria can be visualized by fluorescence microscopy using a band-pass filter.  
FDA (Ex/Em = 494/521 nm)  
Propidium iodide (PI) (Ex/Em = 535/615)

#### Storage condition

-20°C. Protect from light.



*E. coli* under different conditions by FDA-PI double staining

Left : live Right : dead

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