

# CoraLite® Plus 488-Annexin V and PI

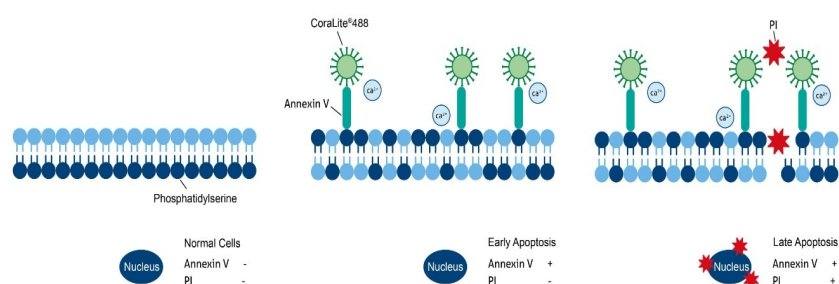
## Apoptosis Kit

Catalog Number: PF00005

### Description

CoraLite® Plus 488-Annexin V and PI Apoptosis Detection Kit provides a quick and easy method to detect apoptosis by marking early apoptotic cells (green) and late apoptotic cells or necrotic cells (red). Results can be read out using flow cytometry or other fluorescence testing equipment. Early apoptotic cells are identified by annexin V (labeled with CoraLite® Plus 488 dye) binding to phosphatidylserine (PS) flipped to the extracellular membrane surface, an early event in apoptosis. Compared with FITC, CoraLite® Plus 488 dye has higher fluorescence brightness, and is not affected by pH in the environment, and has good light stability.

Propidium iodide (PI) is a DNA-binding dye that can stain the nucleus of necrotic cells or cells that lose cell membrane integrity in the late stages of apoptosis. PI can be excited by lasers at 488, 532 or 546nm and CoraLite® Plus 488's excitation maximum is 490 nm.



### Product Information

Components	50 T	100 T
1×Annexin V Binding Buffer	50 mL	50 mL × 2
CL488-Annexin V	250 µL	500 µL
PI	500 µL	1 mL

### Package

50T/100T

### Storage

Store at 4°C, Avoid exposure to light, DO NOT freeze. stable for 24 months after shipment.

### Spectral Characteristics

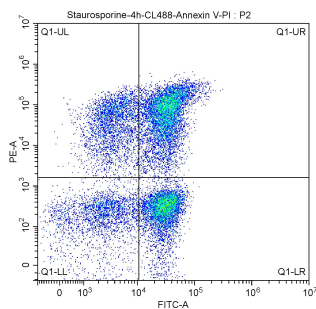
CL488-AnnexinV: Ex/Em=490/515nm

PI: Ex/Em=535/617nm (withDNA)

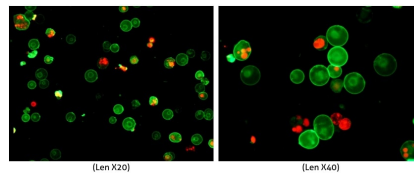
### Cautions

1. Please try to avoid light during storage.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For most accurate results, detection must performed as soon as possible after staining.

## Validation Data



**Flow Cytometry:** The cell population was analyzed in THE SSC/FSC diagram: FITC-A was selected on the X axis to denote CL488-AnnexinV. The Y-axis is represented by PE-A. The meanings of the regions in the figure above: Q1-UL (CL488-AnnexinV)/PI+, cells in this region are necrotic. There may also be a small number of late apoptotic cells in it, even those with mechanical damage. Q1-UR: (cl488-annexinv)/PI+, cells in this region are late apoptotic cells. Q1-LR: (cl488-annexinv)/PI-, cells in this region are early apoptotic cells. Q1-LL: (cl488-annexinv)-/PI-, cells in this region are living cells. The apoptosis rate was usually calculated using Q1-UR+Q1-LR, late apoptosis + early apoptosis group (i.e., all AnnexinV-positive groups).



**Fluorescence Microscopy:** Green: Staining with CL488-Annexin V for apoptotic cells or early apoptotic cells; Red: Staining with PI for dead cells; Yellow: double staining with CL488-Annexin V and PI for necrotic cell or late apoptotic cells.

For technical support and original validation data for this product please contact

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