

CoraLite® Plus 488 TUNEL Assay

Apoptosis Detection Kit

Catalog Number: PF00006

Description

A distinctive feature of apoptosis is degradation of DNA. The DNA fragments tend to be vary in length in integer multiples of 180 bp-200 bp, which is shown as a ladder-like pattern in agarose gel electrophoresis. This kit uses the TUNEL method, using Terminal Deoxynucleotidyl Transferase (TdT) to catalyze the incorporation of CL488-dUTP at the 3'-OH end of the broken DNA of apoptotic cells. CL488-dUTP-labeled DNA can be directly observed with a fluorescence microscope or quantified with a flow cytometer. The TUNEL method can selectively detect apoptotic cells, but not necrotic cells or cells with DNA strand breaks caused by irradiation and drug treatment.

Components

Components	20T	50T
CL488 TUNEL Reaction Buffer	1 mL	2 × 1.25 mL
TdT Enzyme	40 uL	100 uL
Proteinase K (2 mg/mL)	40 uL	100 uL
DNase I (2 U/ L	5 uL	13 uL
10 X DNase I Buffer	100 uL	260 uL

Note: Due to the upgrade and optimization of some TUNEL series products, the original component "TUNEL Equilibration Buffer" has been removed from some products, which will not affect the effect of the assay, and the step of incubation with equilibration solution can be directly omitted from the TUNEL reaction procedure.

Package

20T/50T

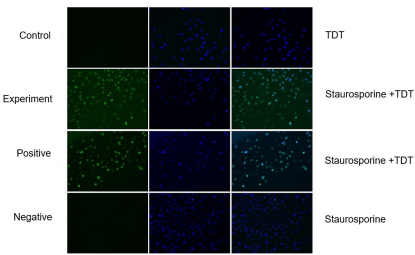
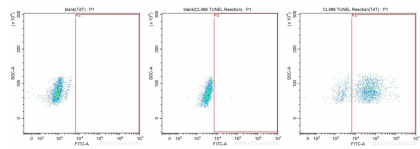
Storage

Store at -20°C. Avoid exposure to light. Stable for 2 years after shipment. Avoid freeze- thaw cycles.

Conjugated

CoraLite® Plus 488 label, CL488 for short, this dye is similar to FITC and other dyes. Ex/Em: 490/515nm

Validation Data



The above experimental results are based on Jurkat cells cultured for three days to perform a flow cytometry experiment to detect the apoptotic cells in the cell sample.

Stauroporine treated HeLa cells for 4.5 h.