



Human Apoptosis cDNA Plate Array

Catalog Number AP-0121

(For Research Use Only)

Introduction

Apoptosis is a cellular process including cytoplasmic condensation and cell shrinkage, chromatin condensation, membrane blebbing, nuclear fragmentation, and the formation of apoptotic bodies, which leads to programmed cell death. During the process, a series of biochemical reactions occur, such as the activation of intracellular proteases and regulation of apoptosis-associated genes. Signosis' Apoptosis-Associated cDNA Plate Array provides an approach for profiling the expression of apoptosis-regulating genes. Human apoptosis cDNA plate array is a plate-based array for profiling 20+ apoptosis-associated genes.

Principle of the assay

Signosis' proprietary cDNA plate array is a plate-based hybridization profiling analysis for monitoring the expression of dozens of genes through reverse transcription of mRNA into cDNA. Like array analyses, total RNA is first reverse transcribed into cDNA in the presence of biotin-dUTP in the assay. Targeted genes are then specifically captured onto individual wells on a plate, instead of membranes, through a pre-coated gene-specific oligonucleotide. The captured cDNAs are further detected with streptavidin-HRP. Luminescence is reported as relative light units (RLUs) on a microplate luminometer. The expression level of genes is directly proportional to the luminescent intensity.

Materials provided with the kit

- A 96-well plate coated with 23 different capture oligos (RT)
- Human Apoptosis Primer Mix (-20°C)
- Reverse transcription buffer mix (-20°C)
- Reverse transcriptase RT (-20°C)
- Streptavidin-HRP conjugate (4°C)
- Plate hybridization buffer (RT)
- 5x Plate hybridization wash buffer (RT)
- Blocking buffer (RT)
- 5xDetection wash buffer (RT)
- Substrate A (4°C)
- Substrate B (4°C)
- Substrate dilution buffer (RT)

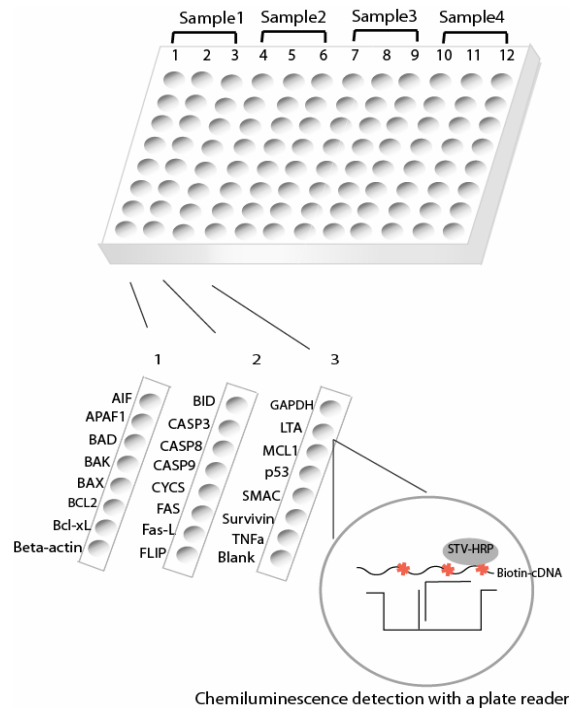


Diagram of human apoptosis plate array assay

Material required but not provided

- PCR machine
- Incubator
- 0.2ml PCR tube
- luminometer plate reader
- ddH₂O (RNAase free)

