## **Multiparametric Detection of Apoptosis (2)**

## Background

This method is used for detection of apoptotic cells via five different morphological and biochemical changes in the cell: loss of cell membrane asymmetry by phosphatidylserine externalisation, loss of cell membrane integrity, loss of mitochondrial membrane potential, chromatin condensation, and degradation of DNA. It's a combination of Annexin V and 7AAD staining, the detection of mitochondria membrane potential changes using TMRE, the analysis of chromatin condensation based on Hoechst red shift, and DNA degradation based on subG1 analysis, all together in the same sample tube.

Furthermore the use of Hoechst33342 allows examination of cell cycle of live and dying cells.

## **Materials**

1.