abcam

Product datasheet

Apoptosis/ Necrosis Assay Kit (green, orange, red) ab270781

製品の概要

製品名 Apoptosis/ Necrosis Assay Kit (green, orange, red)

製品の概要 Cytolytic activity is an important process for eliminating intracellular pathogens and cancer cells. Apoptosis/ Necrosis Assay Kit (green, orange, red) (ab270781) allows you to assess cytolytic activity in cell culture.

Older methods to assess NK cytolytic activity include measuring the release of lactate dehydrogenase, and more commonly, the release of radioactive ^{51}Cr from lysed target cells. Unfortunately, these techniques have several drawbacks. Traditional enzyme-release assays are often skewed by the large number of necrotic effector cells. Problems associated with ^{51}Cr release methods include high spontaneous leakage resulting in high backgrounds, high cost, short half-life, and the health risks due to exposure to radioactive material. Beyond these limitations, these assays frequently underestimate the true level of cytotoxicity, as they are unable to detect early-stage apoptotic cells.

Flow cytometric assays have been developed to overcome some of the difficulties associated with older assays like lactate dehydrogenase and ^{51}Cr release assays. One such early version involved the detection of NK cytotoxicity activity by staining target cells with the green fluorescent dye, F-18, in combination with the DNA intercalating dye, propidium iodide . Since then, a red fluorescent membrane dye, PKH-26, has been used in preference to F-18, and in combination with the viability probe, TO-PRO-3 iodide4-7. However, despite correlations of greater than 95% when compared with the ^{51}Cr release assay, the PKH-26 method is problematic. It is difficult to use at a constant concentration, leading to unreliable staining, and the staining procedure requires multiple steps, often decreasing the viability of the target cells.

Apoptosis/ Necrosis Assay Kit (green, orange, red) is a flow cytometric assay combining the green fluorescing cellular stain, (CFSE), with a red fluorescing live/dead stain, 7-aminoactinomycin D (7-AAD), and SR-VAD-FMK apoptosis detection reagent to concurrently quantify caspase-positive cells. The assay can be used to determine total cytotoxicity in the form of apoptosis and necrosis. It will quantify 4 populations of cells: live; early apoptotic; late apoptotic; and necrotic cells within a single sample tube.

アプリケーション **適用あり:** Flow Cyt

製品の特性

保存方法 Please refer to protocols.

内容	125 tests	250 tests
10X Assay Buffer	1 x 30ml	1 x 60ml
7-AAD, red live/dead stain, 125 tests	1 vial	2 vials
Caspase inhibitor orange red SR-VAD-FMK	1 vial	2 vials
CFSE, green cellular stain, 250 tests	1 vial	1 vial

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab270781の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt		Use at an assay dependent concentration.

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