Senescence Assay Kit (Beta Galactosidase, Fluorescence) ab228562

Overview

Product name: Senescence Assay Kit (Beta Galactosidase, Fluorescence)
Detection method: Flow cytometry-fluorescent
Sample type: Adherent cells, Suspension cells
Assay type: Cell-based (quantitative)
Assay duration: Multiple steps standard assay

Product overview:
Senescence Assay Kit (Beta Galactosidase, Fluorescence) (ab228562) is designed to fluorescently detect senescence-associated Beta Galactosidase activity in cultured cells by flow cytometry. The senescence-associated Beta Galactosidase is present only in senescent cells and is not found in pre-senescent, quiescent or immortal cells.

See Senescence Assay Kit ab65351 to stain for beta galactosidase activity in tissues and cell cultures with detection by microscopy.

Notes:
Senescence is thought to be a tumor suppressive mechanism and an underlying cause of aging. Senescence represents an arrested state in which the cells remain viable, but not stimulated to divide by serum or passage in culture. Senescent cells display increase of cell size, senescence-associated expression of Beta Galactosidase activity, and altered patterns of gene expression.

Tested applications:
Suitable for: Flow Cyt

Properties

Storage instructions:
Store at -20°C. Please refer to protocols.

Components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senescence Dye</td>
<td>1 x 150µl</td>
</tr>
<tr>
<td>Wash Buffer</td>
<td>2 x 100ml</td>
</tr>
</tbody>
</table>
NIH/3T3 (mouse embryo fibroblast cell line) cells were plated at 5 x 10^5 cells per well in a 24 well, treated for 4 hours (with and without 200 nM of Daunorubicin HCl; test and control response respectively) in complete cell culture media for 48 hours at 37°C/5% CO₂. Media was removed and replaced with media containing Senescence Dye and incubated for 2 hours at 37°C/5% CO₂. After incubation time, cells were washed 2x with Wash Buffer, the cells were trypsinized, washed once with Wash Buffer and analyzed by FACS.

**Application**

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Flow Cyt</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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</tbody>
</table>

**Images**

NIH/3T3 (mouse embryo fibroblast cell line) cells were plated at 5 x 10^5 cells per well in a 24 well, treated for 4 hours (with and without 200 nM of Daunorubicin HCl; test and control response respectively) in complete cell culture media for 48 hours at 37°C/5% CO₂. Media was removed and replaced with media containing Senescence Dye and incubated for 2 hours at 37°C/5% CO₂. After incubation time, cells were washed 2x with Wash Buffer, the cells were trypsinized, washed once with Wash Buffer and analyzed by FACS.

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