

## Product datasheet

# Senescence Detection Kit ab65351

★★★★★ [1 Abreviews](#) [160 References](#) [1 Image](#)

### Overview

<b>Product name</b>	Senescence Detection Kit
<b>Detection method</b>	Colorimetric
<b>Sample type</b>	Tissue, Adherent cells
<b>Assay type</b>	Enzyme activity
<b>Assay time</b>	1h 10m
<b>Product overview</b>	<p>Senescence Detection Kit (ab65351) is designed to histochemically detect SA-beta-Gal activity in cultured cells and tissue sections, a known characteristic of senescent cells. The SA-beta-Gal is present only in senescent cells and is not found in presenescent, quiescent or immortal cells.</p> <p>See Senescence Assay Kit <a href="#">ab228562</a> to detect beta galactosidase activity in senescent cells by flow cytometry.</p> <p>Senescence assay protocol summary:</p> <ul style="list-style-type: none"> <li>- wash cells / sections with PBS</li> <li>- fix with fixative solution for 10 min</li> <li>- wash with PBS</li> <li>- incubate in staining solution mix for 1 hr</li> <li>- analyze staining with a microscope</li> </ul>

<b>Notes</b>	<p>This product is manufactured by BioVision, an Abcam company and was previously called K320 Senescence Detection Kit. K320-250 is the same size as the 250 test size of ab65351.</p> <p>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 (SA-beta-Gal) activity, and altered patterns of gene expression.</p>
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### Properties

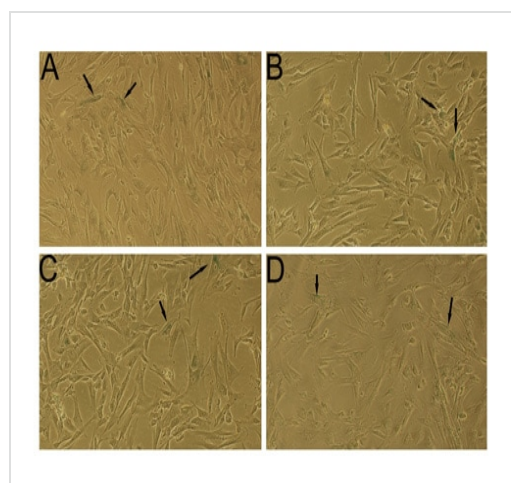
<b>Storage instructions</b>	Store at -20°C. Please refer to protocols.
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Components	250 tests	5000 tests
100X Staining Supplement	1 x 1.5ml	20 x 1.5ml
Fixative Solution III	1 x 125ml	20 x 125ml
Staining Solution I	1 x 125ml	20 x 125ml
X-Gal	1 vial	20 vials

## Relevance

Cellular senescence is a growth-arrest program by which normal diploid cells lose the ability to divide, and it plays a critical role in regulating lifespan both in vivo and in vitro. Cellular senescence occurs as reflection of organism aging and in response to internal and external stress signals.

## Images



Senescence-associated beta-galactosidase staining at the 2<sup>nd</sup>(A), 4<sup>th</sup>(B), 8<sup>th</sup>(C), 12<sup>th</sup> passage *in vitro* expansion. Cells were plated at a density of 10,000 cells/cm<sup>2</sup> for 24h before staining. Five representative images (100x) were taken from diverse areas of cell culture, using phase-contrast microscopy to assess the number of positive cells.

*Image obtained from Angelucci S et al; Proteome Sci, 2010 Mar 26;8:18*

Human Wharton's jelly cells - Senescence Detection  
Kit (ab65351)

Angelucci S et al., Proteome Sci, 8, 18, 2010  
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