

Senescence beta-Galactosidase Staining Kit

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CATALOG #
AAA332464

PRODUCT SYNONYMS

Senescence beta-Galactosidase; Senescence beta-Galactosidase Staining Kit; Cell Senescence; beta-Galactosidase Staining Kit; Senescence beta-Galactosidase staining kit

PRODUCT SPECIFICATIONS

Samples	Cells and tissue sections
Preparation and Storage	Refer to list of materials supplied for storage conditions of individual components. Stable for at least 12 months at recommended temperature from date of shipment. Shipping: Gel pack with blue ice.

ADDITIONAL INFORMATION

Related Product Information for Senescence beta-Galactosidase staining kit	Principle of the Assay: Cells are the basic unit of biological structure and function, as well as the basic unit of biological aging. Cellular senescence is morphologically manifested as degeneration of cell structure, such as nuclear membrane depression, which eventually leads to nuclear membrane collapse, chromatin structure changes, and the number of hyperdiploid and abnormal polyploid cells increases; cell membrane fragility increases. Sexual permeability decreases, and the types and numbers of membrane receptors and the sensitivity to ligands change; lipofuscin accumulates in cells, and many organelles and intracellular structures undergo degeneration. Cell senescence is physiologically manifested as functional decline and low metabolism, such as cell cycle arrest, loss of cell replication ability, weakened responsiveness to mitogenic stimulation, and changes in responsiveness to pro-apoptotic factors; intracellular enzyme active centers are oxidized, Enzyme activity decreased, protein synthesis decreased, etc. The senescent cells can no longer replicate, but they still maintain metabolically active and stain positive for senescence-associated beta-galactosidase activity, which is considered to be a biomarker of cellular senescence. Senescence beta-Galactosidase Staining Kit is a kit for staining and detecting senescent cells or tissues based on the up-regulation of senescence-related beta-galactosidase activity level during aging. With X-Gal as the substrate, under the condition of pH 6.0, the senescent beta-galactosidase catalyzes the formation of dark blue products. So that cells or tissues expressing beta-galactosidase that turned blue were observed under an optical microscope. This kit is suitable for the detection of senescence in cultured cells and tissue sections. It only stains senescent cells, and does not stain pre-senescent cells (senescent cells), quiescent cells (static cells), immortal cells (immortal cells) or tumor cells.
Product Categories/Family for Senescence beta-Galactosidase staining kit	Cell Status Detection; Cell Senescence Detection Kit

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/staining-kits/senescence-beta-galactosidase/332464>