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#56062

# Senescence Marker Antibody Sampler Kit



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1 Kit (8 x 20 microliters)

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Product Includes                                 | Product # | Quantity | Mol. Wt    | Isotype/Source |
|--|-----------|----------|------------|----------------|
| p16 INK4A (D3W8G) Rabbit mAb                     | 92803     | 20 µl    | 16 kDa     | Rabbit IgG     |
| p21 Waf1/Cip1 (12D1) Rabbit mAb                  | 2947      | 20 µl    | 21 kDa     | Rabbit IgG     |
| Phospho-Histone H2A.X (Ser139) (20E3) Rabbit mAb | 9718      | 20 µl    | 15 kDa     | Rabbit IgG     |
| Lamin B1 (D9V6H) Rabbit mAb                      | 13435     | 20 µl    | 68, 45 kDa | Rabbit IgG     |
| HMGB1 (D3E5) Rabbit mAb                          | 6893      | 20 µl    | 29 kDa     | Rabbit IgG     |
| IL-6 (D3K2N) Rabbit mAb                          | 12153     | 20 µl    | 21-28 kDa  | Rabbit IgG     |
| TNF-α (D5G9) Rabbit mAb                          | 6945      | 20 µl    | 18, 25 kDa | Rabbit IgG     |
| MMP-3 (D7F5B) Rabbit mAb                         | 14351     | 20 µl    | 60 kDa     | Rabbit IgG     |
| Anti-rabbit IgG, HRP-linked Antibody             | 7074      | 100 µl   |            | Goat           |

Please visit [cellsignal.com](http://cellsignal.com) for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

## Description

The Senescence Marker Antibody Sampler Kit provides an economical means of detecting multiple markers of cellular senescence. The kit includes enough antibody to perform two western blot experiments with each primary antibody.

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

## Background

Senescence is characterized by stable stress-induced proliferative arrest and resistance to mitogenic stimuli, as well as the secretion of proteins such as cytokines, growth factors and proteases. These secreted proteins comprise the senescence-associated secretory phenotype (SASP). Senescent cells are thought to accumulate as an organism ages, and contribute to age-related diseases, including cancer, through promotion of inflammation and disruption of normal cellular function (1,2).

Because there is no single biomarker that can be used to definitively identify senescent cells, researchers must rely on a collection of biomarkers commonly associated with senescence. The Senescence Marker Antibody Sampler Kit provides a collection of antibodies to commonly used biomarkers of senescence-associated cell cycle arrest (p16 INK4A, p21 Waf1/Cip1), senescence-associated DNA damage (gamma-Histone H2A.X), and the SASP (HMGB1, IL-6, TNF-alpha, MMP3). The kit also includes an antibody to Lamin B1, which is frequently reduced in senescent cells.

## Background References

1. Tchkonina, T. et al. (2013) *J Clin Invest* 123, 966-72.
2. Sun, Y. et al. (2018) *Trends Mol Med* 24, 871-885.

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