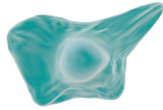


# Senescence is a Spi1-induced anti-proliferative mechanism that may be a safeguard against the development of acute myeloid leukemia

Spi1/PU.1



- transcription factor key regulator of many steps of hematopoiesis
- limits self-renewal of hematopoietic stem cells

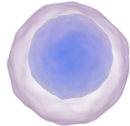


Primary fibroblast

- cellular senescence triggered by a DNA-damage response



Spi1/PU.1  
overexpression



Hematopoietic cells

- cellular senescence triggered independent of a DNA-damage response
- requires  
DNA-binding activity  
a functional p38MAPK14 pathway



Spi1 transgenic  
leukemia mouse model

- senescence  
induced in erythroid progenitors of the BM *in vivo*  
before the onset of the pre-leukemic phase of the erythroleukemia  
lost during the progression of the disease