

Promyelocytic leukemia protein (PML) gene encodes a nuclear protein localizing into the nucleoplasm and distinct nuclear bodies, referred to as PML nuclear bodies (PML NBs). PML is now considered as a gene with tumor-suppressive properties since it is implicated in many nuclear functions affecting cellular proliferation, apoptosis and senescence.

The presented work is a part of a larger project that aims to clarify the regulation of promyelocytic leukemia protein expression and investigates the role of PML protein in cellular senescence. The specific goals of my PhD project were to evaluate new in vitro models for the study of PML, to elucidate the effects of histone deacetylase inhibitors on PML gene expression, and to investigate the association of PML with the nucleolus.