

## CAY10603 AS AN INHIBITOR OF HISTONE DEACETYLASE HDAC6 CAUSES G<sub>1</sub>/S BLOCK OF CELL CYCLE AND PROMOTES AGING OF E1A+cHa-ras-TRANSFORMED MURINE FIBROBLASTS

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In murine fibroblasts transformed by oncogenes of *E1A* and *cHa-ras*, substance CAY10603 is an efficient inhibitor of histone deacetylase HDAC6 in relation to  $\alpha$ -tubulin as its substrate. G<sub>1</sub>/S cell cycle block takes place at low concentrations of CAY in these cells, also their proliferation slows down but apoptotic death does not provoke. CAY treatment in combination with sodium butyrate leads to quick senescence of E1A+cHa-ras-transformants. Besides, autophagic vacuoles and autophagosome protein LC3 accumulate in cytoplasm at CAY action that can demonstrate participation of HDAC6 in autophagy induction in the studied transformed cells.

**Keywords:** HDAC6, CAY10603, E1A+cHa-ras-transformed fibroblasts