The role of liver kinase B1 (LKB1) in the cell's response to exogenous NAD^+

UNIVERSITAT ROVIRA i VIRGILI

- FINAL DEGREE PROJECT -

Biochemistry and Molecular Biology

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Confidential thesis

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Abstract

Cancer cells reprogram their metabolism to sustain dysregulated proliferation. LKB1 is an intracellular serine-threonine kinase with important roles in metabolism and proliferation. Almost 5% of all cancers show altered expression in LKB1. NAD^+ has an important role in energy homeostasis. NAD^+ and its precursors have been explored as potential cancer therapeutics. In this project, the role of LKB1 in response to NAD^+ in U2OS and HeLa cells has been studied. The results showed that LKB1 is necessary for optimal cell proliferation in U2OS cells and that LKB1 is not the only factor dictating cellular response to exogenous NAD^+.

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