

Inactivation of HMGCL promotes proliferation and metastasis of nasopharyngeal carcinoma by suppressing oxidative stress

Wenqi Luo^{#1}, Liting Qin^{#1}, Bo Li², Zhipeng Liao³, Jiezhen Liang³, Xiling Xiao³, Xue Xiao³, Yingxi Mo⁴, Guangwu Huang³, Zhe Zhang³, Ping Li^{1*} and Xiaoying Zhou^{*5}

¹Department of Pathology, First Affiliated Hospital of Guangxi Medical University, Nanning, China

²Department of Radiotherapy, First Affiliated Hospital of Guangxi Medical University, Nanning, China

³Department of Otolaryngology-Head & Neck Surgery, First Affiliated Hospital of Guangxi Medical University, Nanning, China

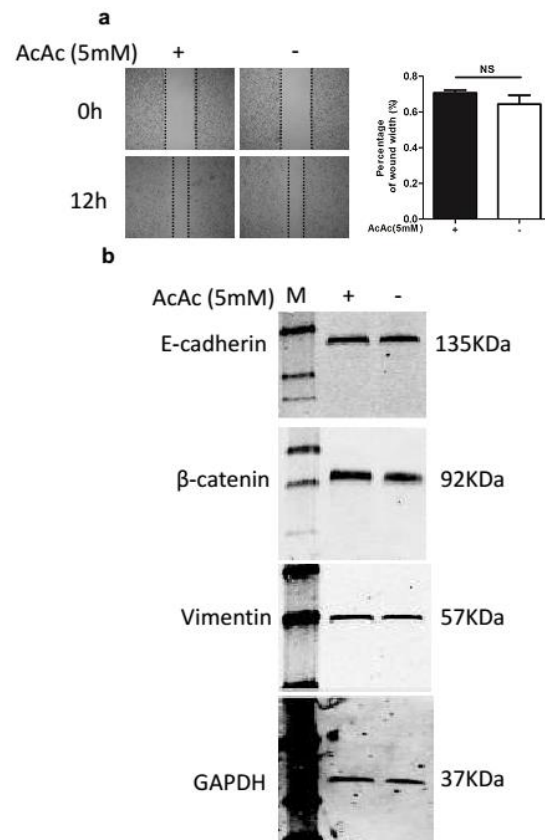
⁴Department of Research, Affiliated Tumor Hospital of Guangxi Medical University, Nanning, China

⁵Life Science Institute, Guangxi Medical University, Nanning, China

#The first two authors contributed equally to this work.

*Correspondence to: Ping Li & Xiaoying Zhou

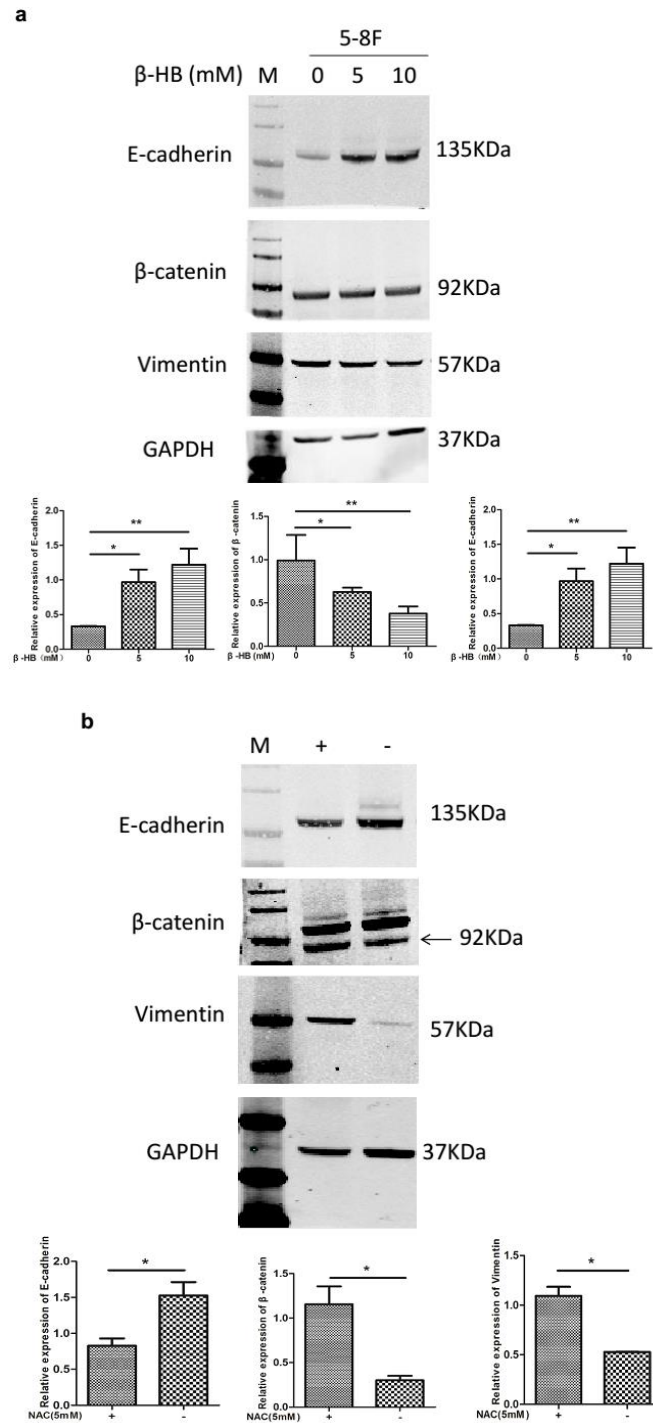
Supplementary Figure 1



Supplementary Figure Legend 1:

The motility of 5-8F cells does not affected by acetoacetate (AcAc). (a) The migration of 5-8F cells upon the treatment of 5mM lithium acetoacetate (Li-AcAc, Sigma Aldrich, # A8509) was analyzed by wound healing assay. (b) Western blot analysis of the expression of three key molecules involved in EMT, E-cadherin, β -catenin and Vimentin. GAPDH was an internal control. Data are mean \pm SD (n=3).

Supplementary Figure 2



Supplementary Figure Legend 2:

Exogenous β-HB treatment promotes the mesenchymal-epithelial transition (MET) in 5-8F cells. NAC reversed the MET functioned by HMGCL in HMGCL-5-8F cells. (a) Western blot analysis of the expression of three key molecules involved in E-cadherin, β-catenin and Vimentin in 5-8F treated by β-HB (0mM, 5mM and 10mM) for

24 h. (b) EMT markers were analyzed by western blot in HMGCL-5-8F cells treated with NAC (0mM, 5mM) for 24 h. GAPDH was an internal control. Data are mean \pm SD (n=3). (*p<0.05; **p<0.01)