Electronic Supplementary Information

Autofluorescence Signatures for Classifying Lung Cells during Epithelial Mesenchymal Transition: A Preliminary Report

Atasi Sarkar^{*,1}, Ananya Barui², Biswajoy Ghosh¹, Anirban Mukherjee³, Ripon Sarkar², Sanghamitra Sengupta⁴, and Jyotirmoy Chatterjee¹

*Corresponding Author E-mail: <u>atasi181@gmail.com</u>

¹School of Medical Science and Technology, Indian Institute of Technology Kharagpur, Kharagpur- 721302, West Bengal, India

²Centre for Healthcare Education, Science and Technology, Indian Institute of Engineering Science and Technology, Shibpur- 711103, West Bengal, India

³Department of Electrical Engineering, Indian Institute of Technology Kharagpur, Kharagpur- 721302, West Bengal, India

⁴Department of Biochemistry, Calcutta University, Ballygunge, Kolkata- 700019, West Bengal, India

Supplementary Figures

Fig S1: F-actin (upper panel) and Vimentin (lower panel) immuno-cytochemical expression of L132 control cells at different time points from 24 hours to 72 hours. (Scale bar = $50 \ \mu m$)

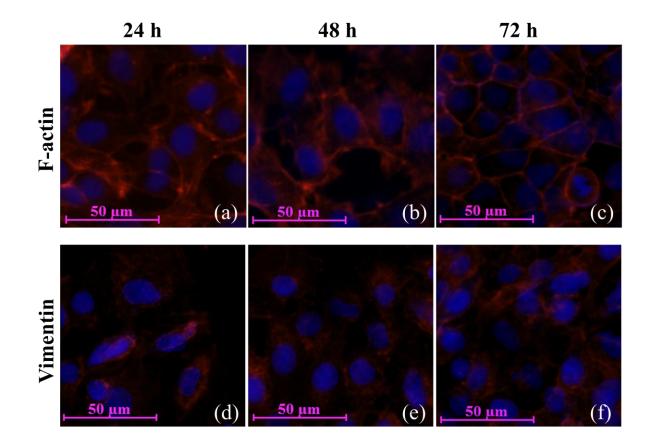


Fig S2: Autofluorescence expression of L132 control cells at different time points from 24 hours to 72 hours. (Scale bar = $100 \ \mu m$)

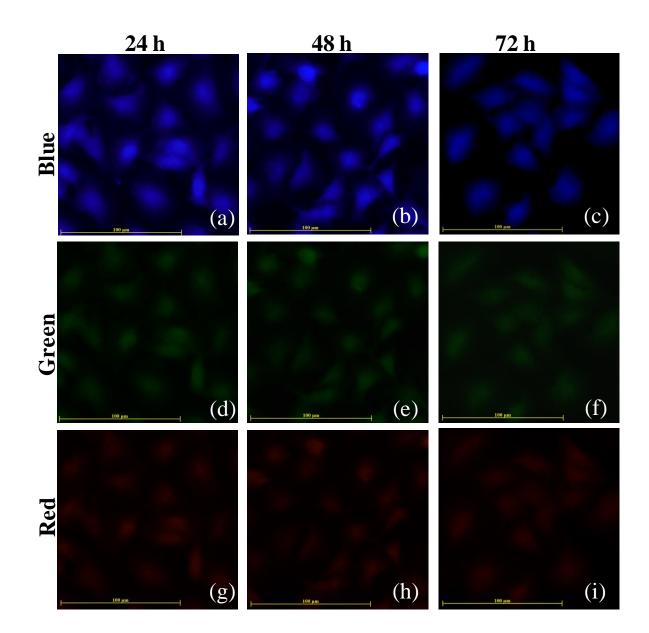


Fig S3: Graphs representing shape (a), autofluorescence (b-d) and cytoskeletal (e. f) features of L132 control cells grown till 72 hours. Insignificant differences in cellular features recorded for cells at different temporal point of growth. The p-value < 0.01 was considered as statistically significant. (ns = insignificant, cell number at each point= 500)

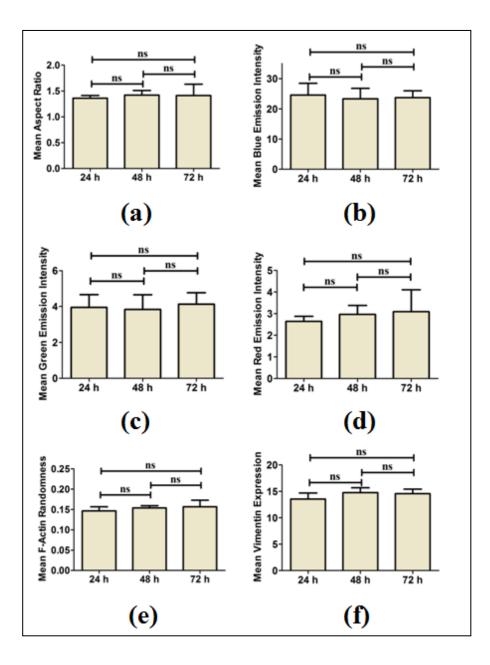


Fig S4: F-actin (upper panel) and Vimentin (lower panel) immuno-cytochemical expression of A549 control cells at different time points from 24 hours to 72 hours. (Scale bar = $50 \mu m$)

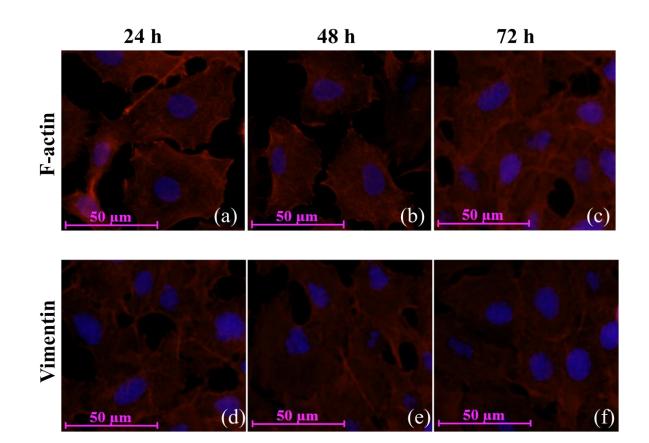


Fig S5: Autofluorescence expression of A549 control cells at different time points from 24 hours to 72 hours. (Scale bar = $100 \ \mu m$)

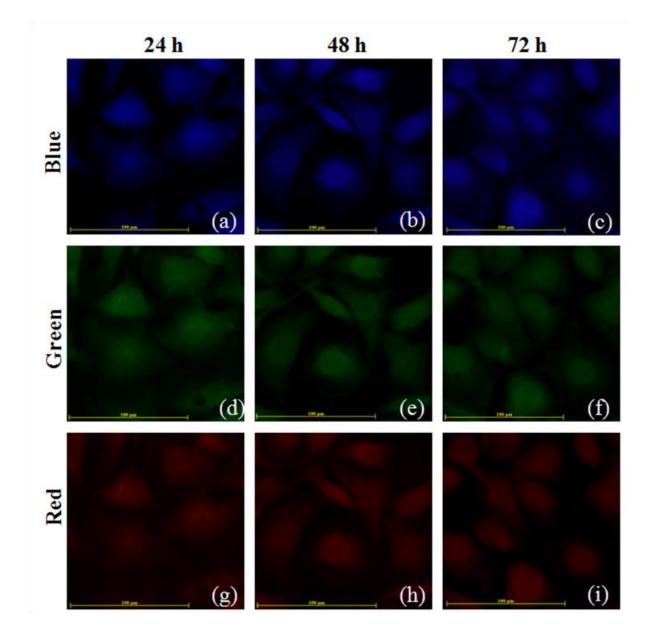


Fig S6: Graphs representing shape (a), autofluorescence (b-d) and cytoskeletal (e. f) features of A549 control cells grown till 72 hours. Insignificant differences in cellular features recorded for cells at different temporal point of growth. The p-value < 0.01 was considered as statistically significant. (ns = insignificant, cell number at each point= 500)

