Title: Molecular mechanisms underlying TGF-ß/Hippo signaling crosstalks – Role of baso-apical epithelial cell polarity

Authors: Saber Ben Mimoun, Alain Mauviel

PII: S1357-2725(18)30060-8
DOI: https://doi.org/10.1016/j.biocel.2018.03.006
Reference: BC 5321

To appear in: *The International Journal of Biochemistry & Cell Biology*

Received date: 26-1-2018
Revised date: 8-3-2018
Accepted date: 12-3-2018

Please cite this article as: Mimoun, Saber Ben., & Mauviel, Alain., Molecular mechanisms underlying TGF-ß/Hippo signaling crosstalks – Role of baso-apical epithelial cell polarity.*International Journal of Biochemistry and Cell Biology* https://doi.org/10.1016/j.biocel.2018.03.006

Molecular mechanisms underlying TGF-ß/Hippo signaling crosstalks – Role of baso-apical epithelial cell polarity

Saber Ben Mimoun and Alain Mauviel*

Team "TGF-ß and Oncogenesis", Institut Curie, Equipe Labellisée LIGUE 2016, INSERM U1021/CNRS UMR3347, Université Paris-Sud, F91400, Orsay, FRANCE

Corresponding author:

Alain Mauviel
Institut Curie
University Center, Building 110
F-91405 Orsay Cedex
FRANCE
Phone: +33 1 69 86 30 43
Fax : +33 1 69 86 30 51
alain.mauviel@curie.fr

ABSTRACT

The ubiquitous distribution of both Hippo and TGF-ß signaling cascade components and their critical implication in tissue homeostasis and disease has led to the discovery of a remarkable slew of interesting and unique features regarding their functional crosstalks. Upstream cellular cues regulating the Hippo pathway, including cell-cell contacts and apico-basal cell polarity have been well characterized. Herein, we provide an overview of the published models of compartmentalized signaling crosstalk mechanisms between Hippo signaling and the TGF-ß/SMAD pathway. How cell polarity impacts the interaction between the two pathways is discussed, together with the specifics of cytoplasmic and nuclear events implicating SMADs and YAP/TAZ, leading to contextual regulation of target gene expression.