

SEMINAR

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Hosted by Prof Bruno Lemaitre

"An interplay between 14-3-3 and the Rab11 binding protein Rip11 is necessary for the completion of cytokinesis"

The 14-3-3 family of phospho-Ser/Thr binding proteins orchestrates a complex network of molecular interactions involved in various biological functions such as cell growth, cell cycle progression, apoptosis and differentiation. By using an affinity-based chromatography combined with tandem mass spectrometry, we have identified numerous new 14-3-3 binding proteins, including the class I Rab11-FIPs which are known as effectors of the small GTPase Rab11. Interestingly, we found that the interaction between Rip11, the sole class I Rab11-FIP in *Drosophila*, and 14-3-3 is necessary for completion of cytokinesis in S2 cells. Indeed, we found that Rip11 regulates the composition of the midbody, the intercellular structure necessary to perform the abscission which will eventually separate the two daughter cells. Hence, our work reveals a new role for both 14-3-3 and Rip11 during cytokinesis and partially explain the recruitment of key regulators of cytokinesis to the midbody.

Thursday, July 2nd, 2015
@ 2.00 p.m.