

Seminar Announcement

Kindlins: Emerging family of cytosolic proteins with multifaceted functions.

Date: 24 June 2016 Friday

Time: 4pm

Venue: Classroom 1, SBS



Speaker: Assoc Prof. Tan Suet Mien
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Abstract

Kindlins belong to a small family of FERM domain-containing cytosolic proteins that promotes cell adhesion and migration. Three evolutionarily conserved but functionally non-redundant kindlin members with different tissue expressions have been identified. The importance of kindlins is underscored by diseases such as Kindler syndrome, Leukocyte Adhesion Deficiency III, and cancer. The molecular basis lies in defective kindlin expression and deregulated kindlin functions. Although kindlins are well established positive regulators of integrin-mediated cell adhesion, the detailed mechanism by which they promote integrin activation remains to be defined. Apart from regulating integrin activation, many lines of evidence suggest kindlins having non-integrin dependent functions. This is achieved by having additional cytosolic binding partners, including RACK1, clathrin HC, and β -catenin. In this seminar, I will give a short presentation on our current research on this interesting family of proteins.