SFB 894

SFB 894 & SFB 1027 Seminar

SFB 1027

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Novel regulatory proteins of Stim1-Orai1 calcium entry pathway

Store operated calcium entry (SOCE) pathway is one of the major mechanisms to arise intracellular Ca2+ concentration in non-excitable cells. Identification of STIM1 as an endoplasmic reticulum Ca2+ sensor and ORAI1 as the pore subunit has dramatically advanced the molecular understanding of SOCE. Almost in parallel with the identification of STIM and Orai1 as critical subunits of SOCE, numerous interacting partners have been described. In my talk, I will focus on novel regulatory proteins of SOCE identified in our genome-wide RNA interfering screen in HeLa cells stably expressing NFAT1-GFP. I will describe the molecular mechanisms by which filamentous septin proteins control the plasma membrane microdomain that are important for STIM-ORAI1 signalling.

Friday, Sept. 20, 2013,
1:00 pm s.t.

Campus Homburg, Building 60,

Lecture Hall Human Genetics

Host: Markus Hoth

All interested people are cordially invited

SFB 894 Ca^{2+} signals: Molecular Mechanisms and Integrative Functions

SFB 1027 Physical modeling of non-equilibrium processes in biological systems