

School of Biological Sciences

SBS Seminar Announcement

Cell signalling by vitamin A and its plasma carrier retinol-binding protein

Prof Noa Noy

Department of Pharmacology, School of Medicine Case Western Reserve University Cleveland, Ohio, USA

Abstract

Vitamin A circulates in blood bound to retinol-binding protein (RBP). At target cells, holo-RBP is recognized by a plasma membrane protein termed STRA6 which transports retinol from extracellular RBP to cells. We recently found that STRA6 also serves as a signalling receptor which, upon binding RBP, activates a phosphorylation cascade mediated by the kinase JAK2 and its associated transcription factors STAT3/5. The involvement of this newly discovered signalling pathway in regulation of energy metabolism and insulin responses and in cancer cell biology will be discussed.

Tuesday, 27 Aug 2013 2.30pm to 3.30pm SBS Classroom 4 (SBS-01n-24)

Host: Assistant Professor Andrew Tan Nguan Soon