Joint Webinar on

3rd Annual summit on

Cell Signaling and Cancer Therapy

&

15th World Congress on

Advances in Stem Cell Research and Regenerative Medicine

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The nuclear translocation of ERK as a therapeutic target for cancer

A hallmark of MAPK signaling is the nuclear translocation of some of its components, which is necessary for their physiological/pathological functions. We have shown that the prevention of the nuclear translocation of ERK inhibits nucleus-dependent processes and pathologies without affecting the cytoplasmic activities of the kinase, and therefore, this inhibition has less side effects or resistance development than the currently used drugs. Our studies established that the nuclear translocation of ERK is mediated by Imp7, and prevention of the interaction between the two proteins blocks the nuclear ERK translocation, and as a consequence, inhibits the growth of many cancers. In the current presentation I will describe our recent studies on the regulation of the nuclear ERK translocation, and how can our finding be used as a new strategy to combat cancer.

Biography

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