STAT3 as a molecular target for prostate cancer prevention and therapy

Signal Transducers and Activators of Transcription (STATs) comprise an important class of transcription factors that have been implicated in a wide variety of essential cellular functions related to proliferation, survival, and angiogenesis. Among various STAT members, STAT3 is frequently overexpressed in tumor cells as well as tissue samples, and regulates the expression of numerous oncogenic genes controlling the growth and metastasis of tumor cells. I will briefly discuss the importance of STAT3 as a potential target for cancer therapy and also provide novel insights into various classes of existing pharmacological inhibitors of this transcription factor that can be potentially developed as anti-cancer drugs.

Biography

After completion of his postdoctoral training at University of Texas MD Anderson Cancer Center, Dr. Gautam Sethi joined Department of Pharmacology, Yong Loo Lin School of Medicine, National University of Singapore in 2008 as an Assistant Professor and was promoted to Associate Professor in 2015. The focus of his research over the past few years has been to elucidate the mechanism(s) of activation of oncogenic transcription factors such as NF-kB/STAT3 by carcinogens and inflammatory agents and the identification of novel inhibitors of these proteins for prevention of and therapy for cancer. The findings of his research work have so far resulted in more than two hundred scientific publications in high impact factor peer reviewed journals (with h index = 68) and several international awards. He currently serves as an Academic Editor for PLOS, editorial board member of Scientific Reports, Cancer Letters, Pharmacological Research, BMC Cancer, Frontiers in Pharmacology, Frontiers in Oncology, Journal of Natural Products in Cancer Prevention and Therapy, and ad-hoc reviewer for several other prestigious international journals.

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