

세미나 초록

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발표 주제	신규한 면역항암제인 ENPP1 저해제
발표 내용	<p>The cGAS-STING (cyclic GMP-AMP synthase-stimulator of interferon genes) signaling pathway has led to significant anti-cancer innate immune responses in cancer immunotherapy.</p> <p>2',3'-cGAMP, the second messenger in the cGAS-STING signaling pathway, binds to STING and promotes the production of various pro-inflammatory cytokines such as type I interferon (IFN), which changes cold tumors to hot tumors through modulating TME. Therefore, activation of STING pathway has been considered as an important target for cancer immunotherapy.</p> <p>Ecto-nucleotide pyrophosphatase/phosphodiesterases 1 (ENPP1), highly expressed membrane-bound enzyme in cancer cells, regulates 2',3'-cGAMP levels by hydrolyzing 2',3'-cGAMP to alter the inflammatory milieu. Thus, ENPP1 inhibition may enhance the activation of STING pathway and anti-tumor immunity in local TME without systemic exaggerated STING activation.</p> <p>From this study, we suggested that targeting ENPP1 is a promising strategy for cancer immunotherapy through the activation of STING pathway in TME.</p>