Symposium

[S44]Frontier of innovative research in post-translational modifications

Organizers: Akihiro Ito (Tokyo Univ Pharm Life Sci, Sch Life Sci), Takashi Uehara (Okayama Univ, Grad Sch Med Dent &Pharm Sci)

Sat. Mar 28, 2020 9:00 AM - 11:00 AM [Room W] Annex Hall 2 (1F)

Although protein functions are derived from amino acid sequences coded in genomic DNA, the activity of many proteins is regulated by post-translational modifications. Regulation of protein functions by post-translational modifications determines cell fate and regulates various life phenomena. In addition, the aberrant regulation of these modifications will often cause various diseases such as cancer. Therefore, elucidation of the functional regulation of proteins by post-translational modifications leads not only to the understanding of the regulation of various biological phenomena, but also to the proposal of novel treatment of diseases. On the other hand, there are proteins that are unknown to undergo post-translational modifications and unknown post-translational modifications in cells. The power of analytical and synthetic chemistries in addition to molecular biology and biochemistry techniques would be very useful for solving these questions. In this symposium, we will introduce functions and regulatory mechanisms of relatively new chemical modifications including acylation and methylation. We will also introduce comprehensive exploration methods for modified proteins and artificial control of modifications using synthetic chemistry techniques, and analytical methods for post-translational modifications. We hope that this symposium will enhance interdisciplinary research among cell biology, pharmacology, organic chemistry and analytical chemistry with "post-translational modification" as a keyword.

9:00 AM - 9:03 AM

[S44-Opening]趣旨説明

伊藤 昭博[1] (1. 東京薬大生命)