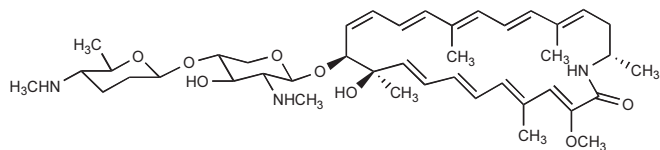


S13-2 Natural product-based chemical biology and drug discovery

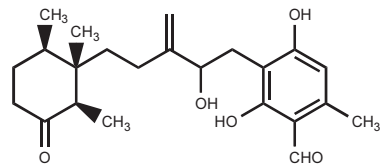
○Masaya IMOTO¹

¹Keio Univ., Dept. Biosci. Inform.

The sequencing of the human genome was going to complete, and huge amounts of genomic data were becoming available. Because bioactive small molecules such as chemical inhibitors are widely used as biochemical tools for elucidation of regulatory mechanism of living cells and as medicines for various types of diseases, research field of chemical biology using bioactive small molecules was expected to be a center of post-genome sciences. Therefore, we searched for small molecules that modify cell function from microbial origin, because natural products produced by microorganisms typically have the characteristics of high stereochemical and three-dimensional structural diversity, biochemical specificity, and other favorable molecular properties, in comparison with synthetic drugs or combinatorial libraries. In this symposium, I would like to talk about bioactive small molecules that we isolated from microbial origin and chemical biology studies using those compounds.



Bcl-2 inhibitor Incednine



Cell migration inhibitor Moverastin