S34-5 Search for medicinal seeds from natural products based on cell-based assay

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Cell-based assay is useful screening system to find not only new medicinal seeds but also new drug targets in comparison with high throughput screening by using enzymes or receptors, because cell-based assay can widely search the compounds that are effective to unknown targets. So far, we have searched new medicinal seeds from marine organisms by the constructed cell-based assays, which applied characteristic phenotypes of cells or microbes in the human body. In this symposium, we introduce our recent study of the bioactive compounds isolated on the basis of bioassay-guided separation. In addition, new methods for analysis of the target molecules based on the techniques of chemical biology and chemical genetics are also presented.