

Validation of MOA for Andrographolide in Fission Yeast (*S. pombe*) Knock-out Library

Presenter Chan-Ju Lee, Garam Lee, Jisun Choi, Namshin Kim, Han-Oh Park*

Bioneer Corporation, Daejeon, Republic of Korea

E-mail: moda22@bioneer.co.kr

Yeast knock-out library has been widely used for drug target screening because it is very simple and efficient to pin-point target genes mediated by drug-induced haploinsufficiency. So far, there are two yeast knock-out libraries manufactured from *S. cerevisiae* and *S. pombe*. Nat. Biotech. (2010)¹ quoted that *S. pombe* is a more valuable eukaryotic model yeast than *S. cerevisiae* in terms of number of single copy essential genes. We provide products and customer services for drug target screening and mode of action (MOA) validation in *S. pombe* such as GPScreen-FAST™, fission yeast (*S. pombe*) knock-out library and a fast NGS-based barcode counting platform. Andrographolide is an active compound in ParActin (extract from *A. paniculata*) which is used for arthritis supplements such as AnaParActin™ (AceBiome Inc.) for joint pain and health. Although andrographolide is known as NF-κB inhibitor and has anti-inflammatory effects, the detailed MOA of andrographolide is still unelucidated yet. Here, we will show how we have successfully been validating true MOA of andrographolide using our *S. pombe* knock-out library.

References

¹ Kim, D.-U. et al. *Nat. Biotechnol.* **2010**, 28(6), 617-623.
