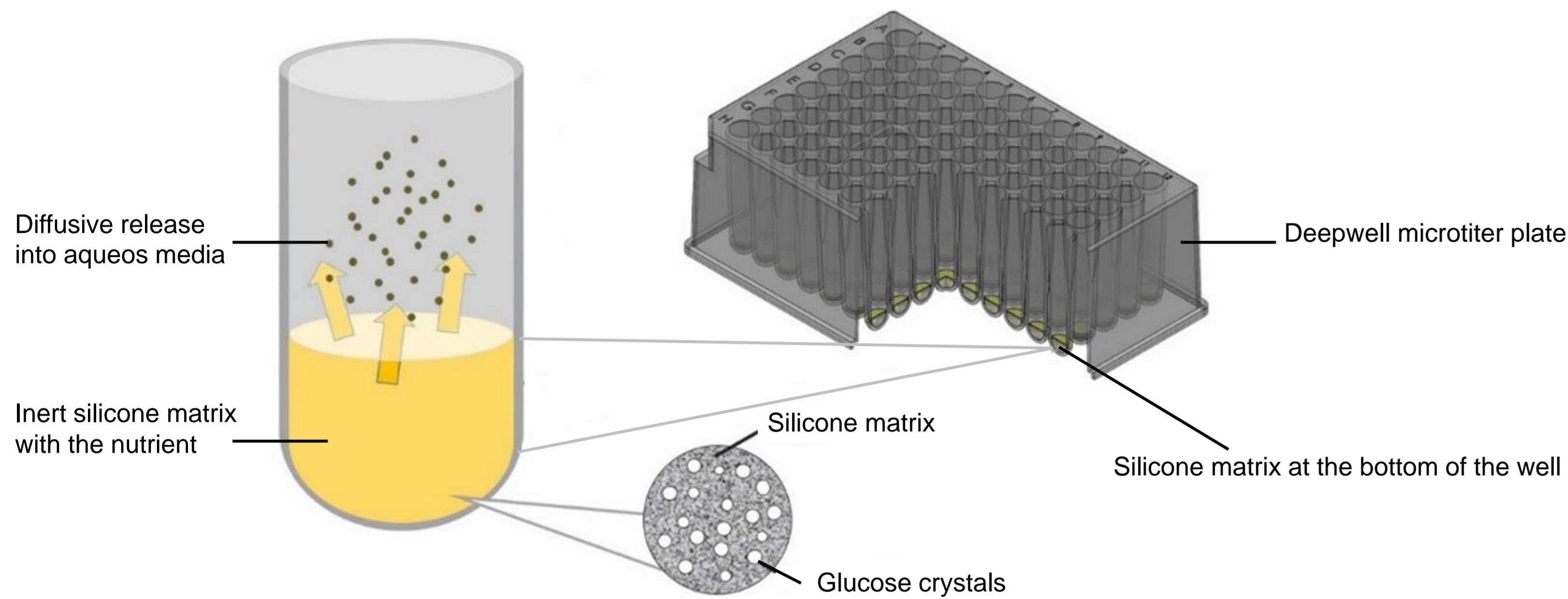


Kuhner shaker

Feeding Technology

Clemens Lattermann, Markus Landenberger

Fed-batch feeding tool for high-throughput screening

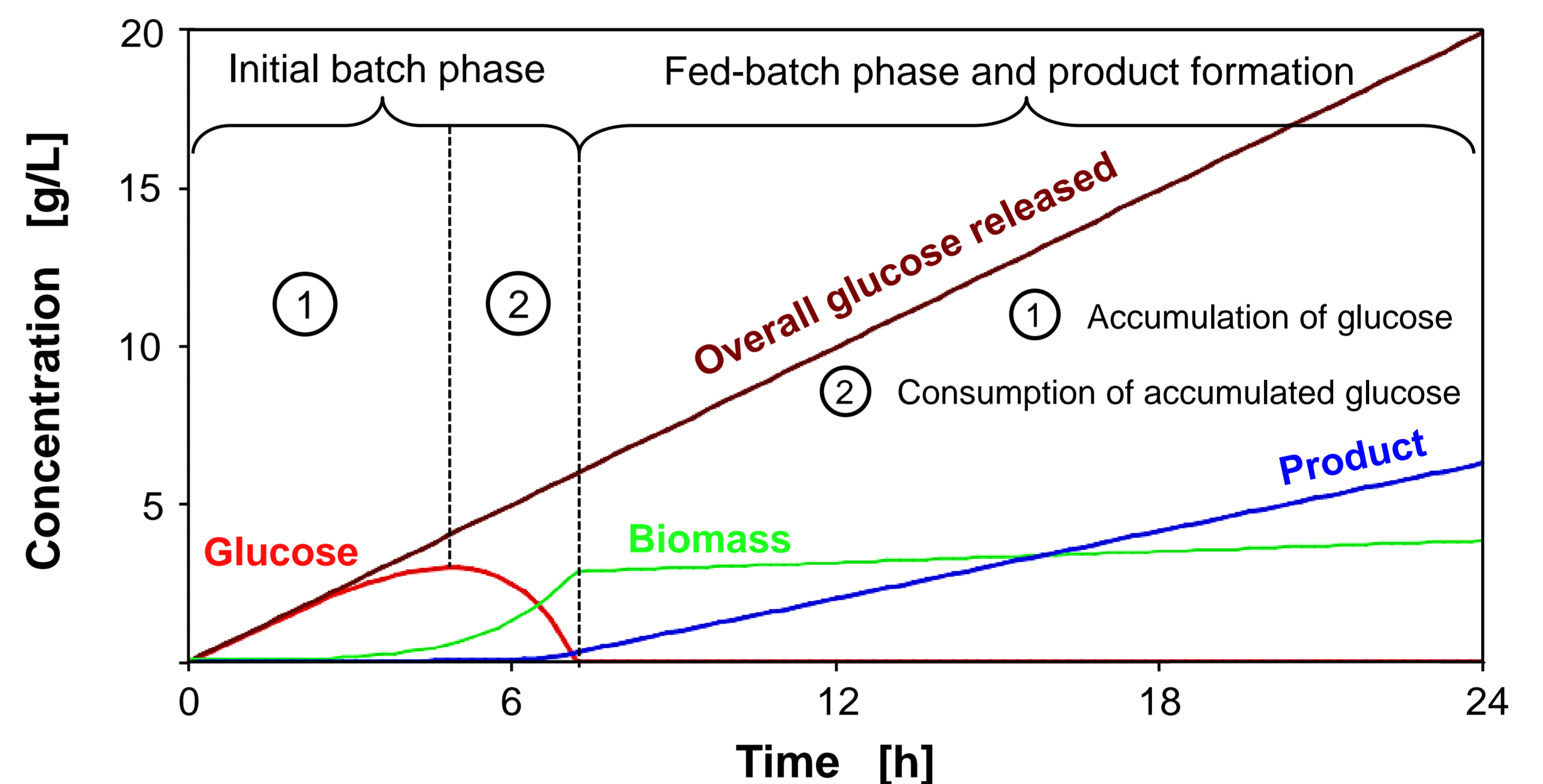


- Release of different nutrients, such as sugars and glycerol
- Different release kinetics for individual feeding profiles
- Easy integration into your cultivation system
- 24-, 48-, 96-well plates (FeedPlates)
- Disc format for shake flask cultivation (FeedBeads)
- Linear feeding up to 7 days

Why should I use the Kuhner Feeding Technology for my screening?

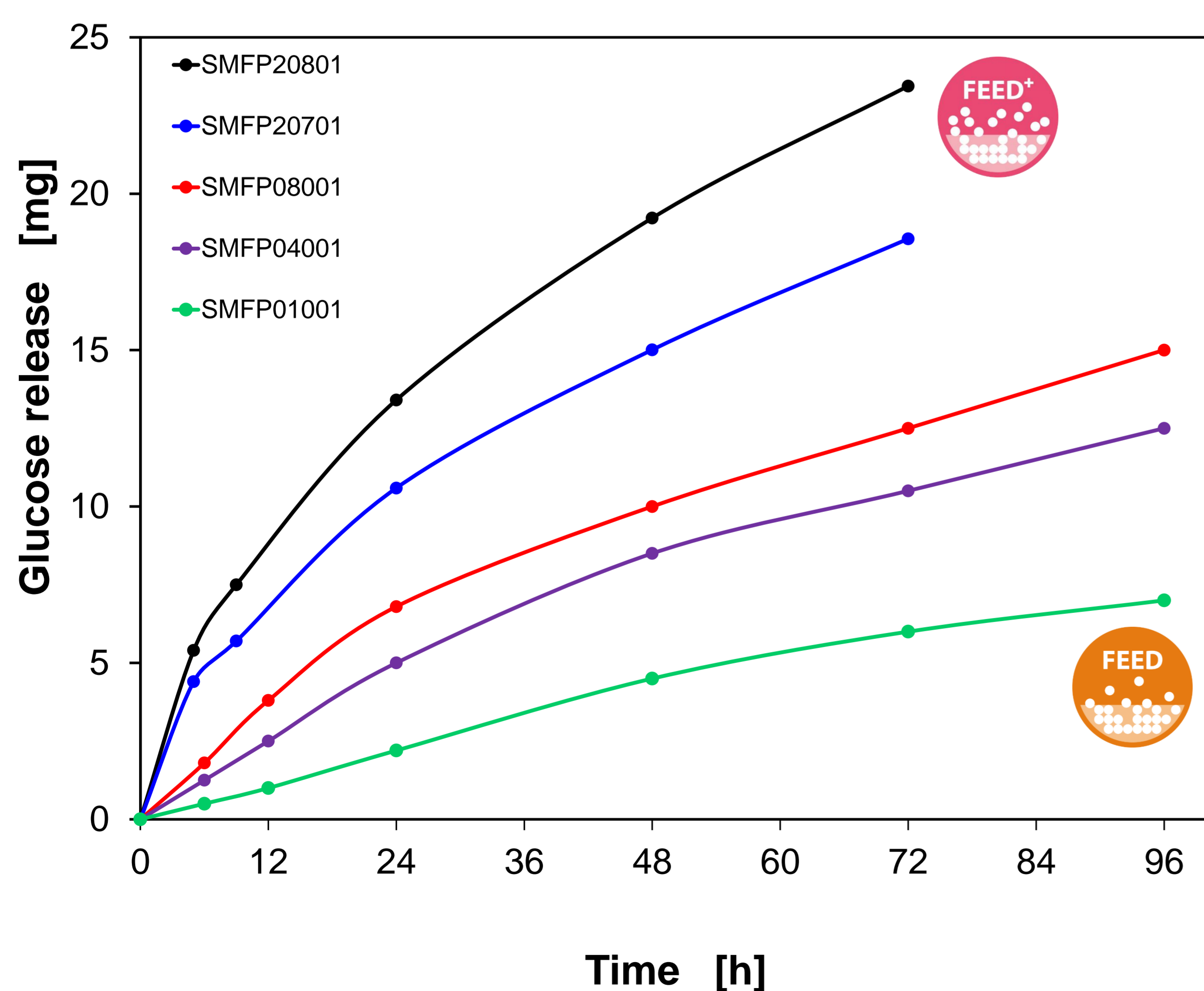
- Higher product yields in catabolite repressed organisms
- Avoiding:
 - overflow metabolism
 - substrate and pH inhibition
 - oxygen limitation
- Standardization of preculture for reproducible screening
- Optimal selection of strains for fed-batch cultivation

Simulation of a catabolite-repressed strain in fed-batch mode



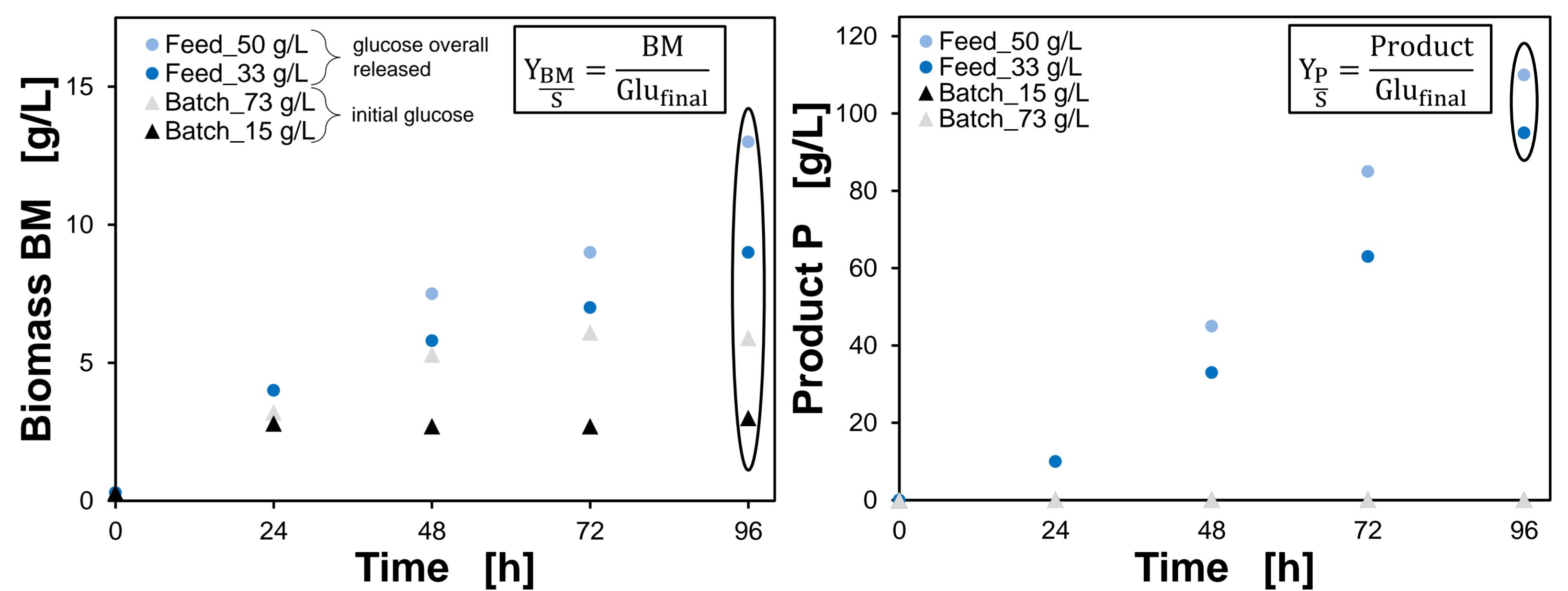
Glucose release and cultivation of *S. cerevisiae*

Release rates of 96 round well FeedPlates



Cultivation of *S. cerevisiae* in shake flask with FeedBeads

YNB-medium, 100 mL flask, $V_L = 9$ mL, $T = 30$ °C, 209 rpm, $d_0 = 19$ mm, Nutrient: Glucose, SMFB08001



	$Y_{BM/S}$ [g/g]	$Y_{P/S}$ [g/g]
Feed_50 g/L	0,26	2,2
Feed_33 g/L	0,27	2,9
Batch_73 g/L	0,08	0
Batch_15 g/L	0,20	0

