Fig. S1 Cell cycle changes in fermentation broth during batch growth. Red, proportion of cells in the G0/G1 phase; blue, proportion of cells in the G2/M phase; grey-shaded, proportion of cells in the S phase.

Fig. S2 Apoptosis rate of samples taken at the end of continuous immobilisation
fermentation.
### Tables

**Table S1** Primers used in this study and their sequences

| Primer name | Primer sequence | Source |
|-------------|-----------------|--------|
| UP-CLN3-F   | CGCCTGGGCGTTGTCCTTTCTGCCCC | This work |
| UP-CLN3-R   | AAATATCAGGACGAAGATGGTGACATGGTTTCAATTCT | This work |
| DOWN-CLN3-F | ACAAGAAATTGGAAAACCATGACCACCTCTCCGATCTGATA | This work |
| DOWN-CLN3-R | AATGAGGAAACAAGAGATAATTGTT | This work |
| UP-SIC1-F   | TTCTGCATATTGCTTAACTG | This work |
| UP-SIC1-R   | AACTTTTTTTTTTCATTCTTTTCGTAATAGTCCCTG | This work |
| DOWN-SIC1-F | GCAGGGACTATTACACAAGAAAAGATAATGAAAAAATAATGTT | This work |
| DOWN-SIC1-R | CTCCCCTCTTCAAGTTTAC | This work |
| UP-ACE2-F   | GAATAATGAAAACGATGATGGCCTC | This work |
| UP-ACE2-R   | TCATCTGGTAAGGACGGTGCTTCTCCCAATTTTCG | This work |
| DOWN-ACE2-F | AACGAAAAATTGGAAGCAACGTCTCCTTTACCAGA | This work |
| DOWN-ACE2-R | TTCTCCATTTTCAATTTACCAGC | This work |
| CLN3-F      | GTTCCTTTACGTTAGGTATGCTCAGGCGAAGATTTTTCTG | This work |
| CLN3-R      | GCCTGACTACGTGATATCTTCAGCAGGCTGGGATATTGAAAG | This work |
| SIC1-F      | TCCTATTCACTGGACTGATGCTCTCCTCCACCCACAC | This work |
| SIC1-R      | GCCTGACTACGTGATATCTCAATGCTCTTTCGATCCCTA | This work |
| Primer   | Sequence                        | Source  |
|----------|---------------------------------|---------|
| ACE2-F   | TCCTATTCAGTTAGCTAGCATGGATAACGTTGATGC | This work |
| ACE2-R   | GCCTGACTACGCATGATCTCAGAGCATCAGTTTC | This work |
|          | GT                              |         |
| Gene  | Forward primer sequence (5′-3′)       | Reverse primer sequence (5′-3′)       |
|-------|--------------------------------------|--------------------------------------|
| CLN1  | AAAACTTGGGAGGGTGCAA                  | GACCCGCGCAATAATGAAC                  |
| CLN2  | GATGTATCCGCGTGCGAGTA                 | GGACCGTGTTCTTGATTTGT                 |
| CLB5  | GCTGGTAGAGGTCACGGAAA                 | TTGCCGCCGATGAAAAGTGAG                |
| CLB6  | GGACACGCAATCTCCCTATCA                | AGGCAATGAAACAGGCAAGTGGA             |
| CLB3  | TAGTTGTTAGCTGCGGTTG                  | ATGGTGCCAAACAGGAAGAAT                |
| CLB1  | GCCTTCTGCCGGAAAACCTCTA               | CATGCACGTCGTCTGTCTCGTA               |
| CLB2  | GGTTGCGACATCATGCTCCTTT              | TTCCGTACATGCAACGTCTG                 |
| PCL2  | ATCGCAAGAGACTGTCGCA                 | GAGAGGGTCGAAAGTGGAAGG               |
| PCL9  | ACACTGGACCACGTACACAG                | TCCTTGATAGGCCCGAGGAA                 |
| FLO1  | AACCGCTTCAACTGGTTGT                  | AACCAGCTTCAACTGTTGT                  |
| FLO5  | TGGTACCACGACATCCCTGC                | TGAGCGCGCTAACAATGGA                 |
| FLO11 | CCGCTGGAAGACGCAACT                   | TGAGGCTAGCATTGCGAG                   |
| FKS1  | ACCTTATCAGGCCCAACCGG                 | CAGCAGCGACATTTGGATCG                 |
| FKS2  | TATGGTGCGGCAAGGCAAT                 | CCTTCAGGCAAGGGATCGA                  |
| FKS3  | TTATGGACACTCGGTGGTG                 | CACGGAGATTTGGCCGTTT                  |
| TPS1  | TAACGCTAAGGGCGCAACTGA               | CTGGTACTGTCCGTACTGC                  |
| TPS2  | TCCAAAGTGCTTGCTACGGTC               | CTTTGGCCGTTGTAAGAAC                 |
| TPS3  | TACAACGAGTCGGCTACGTCC              | GAAAGGCAACACGCGAAGA                 |
| CLN3  | TTGACCAGCGCTTTGGATTTC               | TCGAATGTGGCCGACTGACA                |
| SIC1  | GCTTACGTCTCCTCAACGCT                | CACAATTTGTGCGTGGGA                   |
| ACE2  | CACATTTTGGCTGCGGGA                  | TGGTTCAGTGTCTCATCTGG                 |