Glucose and maltose metabolism in MIG1-disrupted and MAL-constitutive strains of Saccharomyces cerevisiae - DTU Orbit (13/12/2018)

**Glucose and maltose metabolism in MIG1-disrupted and MAL-constitutive strains of Saccharomyces cerevisiae**

The alleviation of glucose control of maltose metabolism brought about by MIG1 disruption was compared to that by MAL overexpression in a haploid Saccharomyces cerevisiae strain. The sugar consumption profiles during cultivation of the wild type, single transformants and a double transformant in a mixed glucose-maltose medium revealed that the MAL-constitutive strains were more alleviated than the single MIG1-disrupted transformant. While all transformants exhibited higher maximum specific growth rates (0.24-0.25 h\(^{-1}\)) in glucose-maltose mixtures than the wild type strain (0.20 h\(^{-1}\)), the MAL-constitutive transformants grew even faster (0.27-0.30 h\(^{-1}\)) in pure glucose medium than the wild type strain (0.24 h\(^{-1}\)).

**General information**

State: Published
Organisations: Department of Biotechnology, Department of Chemical and Biochemical Engineering, Center for BioProcess Engineering
Contributors: Klein, C., Olsson, L., Rønnow, B., Mikkelsen, J. D., Nielsen, J. B.
Pages: 287-292
Publication date: 1997
Peer-reviewed: Yes

**Publication information**

Journal: Food Technology and Biotechnology
Volume: 35
Issue number: 4
ISSN (Print): 1330-9862
Ratings:
  - BFI (2018): BFI-level 1
  - Web of Science (2018): Indexed yes
  - BFI (2017): BFI-level 1
  - Web of Science (2017): Impact factor 1.168
  - Web of Science (2017): Indexed yes
  - BFI (2016): BFI-level 1
  - Scopus rating (2016): CiteScore 1.11 SJR 0.428 SNIP 0.565
  - Web of Science (2016): Impact factor 0.891
  - BFI (2015): BFI-level 1
  - Scopus rating (2015): CiteScore 1.4 SJR 0.573 SNIP 0.786
  - Web of Science (2015): Impact factor 1.179
  - Web of Science (2015): Indexed yes
  - BFI (2014): BFI-level 1
  - Scopus rating (2014): CiteScore 1.19 SJR 0.447 SNIP 0.7
  - Web of Science (2014): Impact factor 0.92
  - BFI (2013): BFI-level 1
  - Scopus rating (2013): CiteScore 1.52 SJR 0.554 SNIP 1.062
  - Web of Science (2013): Impact factor 0.977
  - ISI indexed (2013): ISI indexed yes
  - BFI (2012): BFI-level 1
  - Scopus rating (2012): CiteScore 1.25 SJR 0.439 SNIP 0.819
  - Web of Science (2012): Impact factor 0.977
  - ISI indexed (2012): ISI indexed yes
  - BFI (2011): BFI-level 1
  - Scopus rating (2011): CiteScore 1.53 SJR 0.553 SNIP 0.835
  - Web of Science (2011): Impact factor 1.195
  - ISI indexed (2011): ISI indexed yes
  - BFI (2010): BFI-level 1
  - Scopus rating (2010): SJR 0.43 SNIP 0.895
  - Web of Science (2010): Impact factor 0.976