



# *Saccharomyces cerevisiae* Meyen ex E.C. Hansen

204701™

## Description

**Strain designation:** XD83

**Deposited As:** *Saccharomyces cerevisiae* Hansen, teleomorph

**Type strain:** No

**Genotype:** MATa/MATalpha his4-519/his4-519 leu2-3/leu2-3 lys1-1/lys1-1 +/-pet1  
arg4-4/+ +/arg4-17 ade2-18/+ thr(1?)/+ [rho+] [E(s) C(s)]

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## Storage Conditions

**Product format:** Frozen

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## Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

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## BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

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## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## Growth Conditions

**Medium:**

ATCC Medium 1069: YPAD medium

**Temperature:** 25°C

**Atmosphere:** Aerobic

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## Handling Procedures

**Frozen ampoules** packed in dry ice should either be thawed immediately or stored in liquid nitrogen. If liquid nitrogen storage facilities are not available, frozen ampoules may be stored at or below -70°C for approximately one week. **Do not under any circumstance store frozen ampoules at refrigerator freezer temperatures (generally -20°C).** Storage of frozen material at this temperature will result in the death of the culture.

1. To thaw a frozen ampoule, place in a 25°C to 30°C water bath, until just thawed (approximately 5 minutes). Immerse the ampoule just sufficient to cover the frozen material. Do not agitate the ampoule.
  2. Immediately after thawing, wipe down ampoule with 70% ethanol and aseptically transfer at least 50 µl (or 2-3 agar cubes) of the content onto a plate or broth with medium recommended.
  3. Incubate the inoculum/strain at the temperature and conditions recommended.
  4. Inspect for growth of the inoculum/strain regularly. The sign of viability is noticeable typically after 1-2 days of incubation. However, the time necessary for significant growth will vary from strain to strain.
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## Notes

Strains for detection of mutations, recombination, and aneuploidy (BG1)

Strain XD83 can be used to study induced mutation and recombination. *his4-519* and *leu2-3* are frame-shift mutations, and *lys1-1* is an ochre-suppressible mutation. Both frame-shift and base substitution events can be studied by reversion of these alleles. *arg4-4* and *arg4-17* are non-complementing alleles. XD83 reverts to Arg<sup>+</sup> primarily by conversion-type events. Mitotic crossing-over between *ade2* and the centromere will produce red/white sector colonies.

Every effort is made to provide strains having the exact requirements as listed in the catalogue. However, yeast strains, like every other biological system, are constantly undergoing change, so that the sample you receive may not have exactly the same markers as determined when the strains were stored: reversion of certain mutations may have occurred, new mutations or suppressors which impart selective advantage to the strain may have been acquired and there may be ploidy changes. We urge checking the strains before extensive use.

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Saccharomyces cerevisiae* Meyen ex E.C. Hansen (ATCC 204701)

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## References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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## Revision

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204701

Product Sheet

**Contact Information**

ATCC

10801 University Boulevard

Manassas, VA 20110-2209

USA

US telephone: 800-638-6597

Worldwide telephone: +1-703-365-2700

Email: [tech@atcc.org](mailto:tech@atcc.org) or contact your local distributor

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