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Alpha Factor #: 1,0 HG-AF-0001

STORE AT: -20°C
EXP: 05/17

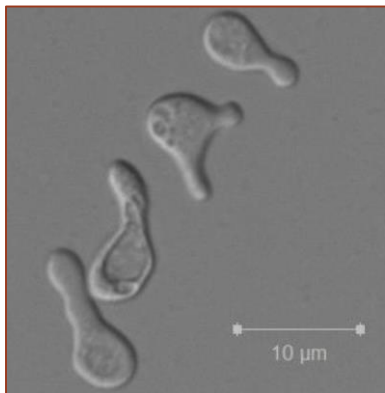


Fig. 1: Cells, bearing a mutation in the *BAR1* gene leading to high pheromone sensitivity, were incubated with 1 µM α -factor for induction of the "Shmoo"-phenotype

Description:

Haploid cells of the yeast *Saccharomyces cerevisiae* express either an a- or α mating-type. The respective cells secrete small peptides as pheromones, which are called α -factor in the case of α -cells. These pheromone bind to specific receptors of cells of the opposite mating type, inducing the pheromone signal cascade and a genetic program, leading to e.g. morphological changes – the so called "Shmoo" – and a cell-cycle arrest.

Concentration:

5 mM in 120 µl (0,1 M sodium acetate pH 5.2) each vial, equivalent 1 mg per vial

Recommended Usage:

For heterologous gene expression using e.g. promoters of genes of the mating response pathway as well as for "Shmoo" induction or cell-cycle arrest we recommend the use of 10 – 100 µM, depending on the yeast host strain

Functionality:

α -factor pheromone was tested for induction of morphology-changes ("Shmoo") (Fig. 1) and cell-cycle arrest (Fig. 2).

Specification:

Sequence: WHWLQLKPGQPMY
Activity Test: "Shmoo" induction and cell-cycle arrest
Purity: ≥ 95% HPLC

Storage Conditions:

Freeze at – 20°C immediate after delivery. Avoid many cycles of thawing and freezing. Make aliquots if reasonable.

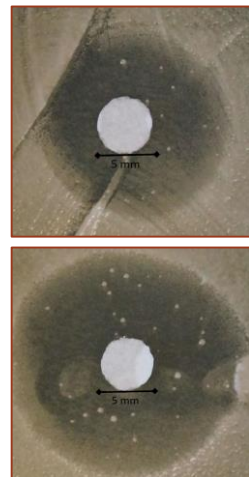


Fig. 2: Cell-cycle arrest of a-cells with a *bar1* mutation due to α -factor. Cells were incubated in the presence of 10 µM (upper panel) and 50 µM (lower panel) α -factor on a filter plate. Growth is inhibited due to the cell-cycle arrest.



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