



ZYMO RESEARCH

The Beauty of Science is to Make Things Simple

PRODUCT INFORMATION

α-Factor

Description: The α-factor pheromone arrests yeast in G₁ of the cell cycle. When yeast a and α cells encounter mating pheromones they induce genes necessary for mating, arrest the cell cycle in G₁ altering cell surface and nuclear determinates, and also cause morphological changes (see Figure 1 below).

Concentration: 10 mM in 0.1M sodium acetate pH 5.2, 240 μl, total 4 mg.

Recommended Usage: Simply thaw and use it directly for your experiments. α-Factor is functionally tested for its activity and is stable for multiple freeze-thaw cycles. We recommend using the α-factor at concentrations of ~5 μM (*bar1Δ*) to 100 μM (*BAR1*).

Specifications:
Sequence: TRP-HIS-TRP-LEU-GLN-LEU-LYS-PRO-GLY-GLN-PRO-MET-TYR
Molecular Weight: 1684
Activity Test: Pass (G₁ arrest testing)
Purity: Minimum 98% (HPLC)

Shipping and Storage Conditions: -20°C for short term storage (<6 months), -70°C for long term storage.

Assay Date: _____

Approved: _____

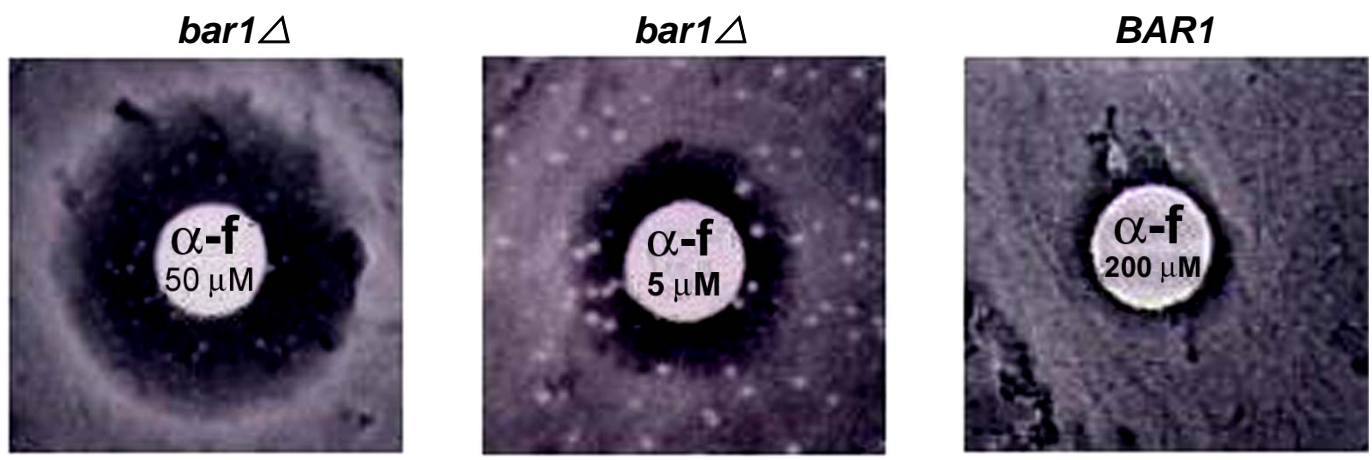


Figure 1. Activity test of α-Factor. α-Factor peptide pheromone (10 μl) was applied to sterile filters on a lawn of MATa cells, which were either wt for the BAR1 (200μM, right) protease or *bar1* (50 μM, left; 5 μM, center). Sensitivity to the α-factor is evident as the zone of clearing (G₁ arrested cells). Cells that have the BAR1 protease deletion are more sensitive to α-factor than BAR1 protease positive wild strain which require ~20-50x more pheromone to arrest cells.

Products	Cat No	Size
α-Factor Mating Pheromone	Y1001	240 μl