

## PIKA FASTORANGE® WILD YEAST AGAR

Agar for detection of *Saccharomyces cerevisiae* var. *diastaticus* and other Wild Yeasts

SKU #2039-2

Description	Amount	Storage
Culture medium for the detection of <i>Saccharomyces cerevisiae</i> var. <i>diastaticus</i> and other wild yeasts.	12 x 170 mL	Store dark at ambient temperature

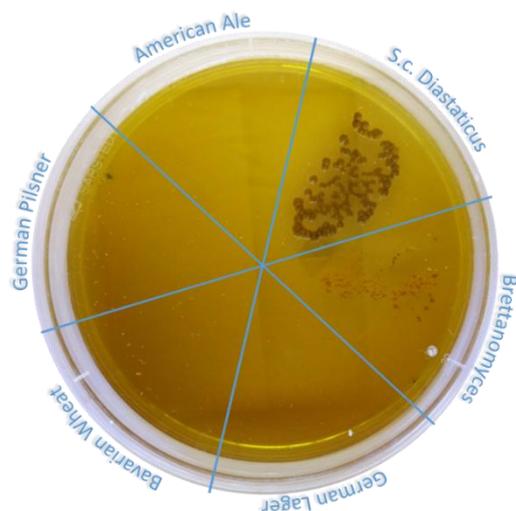
**Warning!** Read the manual and the Safety Data Sheet before starting the analysis. Safety Data Sheets are available in the download area from [www.pika-weihenstephan.com](http://www.pika-weihenstephan.com). All handling steps should be performed under sterile conditions. Wear appropriate protective clothing.

For *in vitro* use only.

### Product description

PIKA FastOrange® Wild Yeast Agar is a ready-made culture medium which was specifically developed for the detection of wild yeasts in breweries and wineries. The ingredients are optimized to grow both non-*Saccharomyces* and *Saccharomyces* wild yeasts, including *S. cerevisiae* var. *diastaticus* and *Brettanomyces* (*Dekkera*) yeasts, while suppressing growth of most brewing yeasts.

The principle of its selectivity is based on the [EBC method 4.2.5.1 Saccharomyces Wild Yeasts, Cu-differentiation](#) which describes use of agar supplemented with copper sulphate to inhibit the growth of brewers' yeast.



### Detectable microorganisms

Yeast	Growth conditions
All wild yeasts, including superattenuator yeasts <i>Brettanomyces</i> sp., <i>S. cerevisiae</i> var. <i>diastaticus</i> and other heat tolerant strains	Aerobic at 25 °C
Specific for <i>Saccharomyces cerevisiae</i> var. <i>diastaticus</i> and other heat tolerant wild yeasts	Aerobic at 37 °C

### Guidelines for use

Although growth of most brewing yeasts and bacteria\* is suppressed, it is recommended to test the in-house brewing strains for better comparability of results.

### Agar preparation

- Heat bottle in a 90°C water bath to melt the agar. Alternatively, heat uncapped bottle in a microwave oven on a low setting until agar has melted.

**Important!** Always remove cap before microwaving the bottle, otherwise it might explode!

- Prepare agar:

Sample type	Agar preparation
- Membrane filters - Liquid sample to spread or streak out	Agar plates: pour liquid agar into vented Petri dishes and let cool to solidify before use
Pour plates	Store melted agar at 50°C until sample processing

- Avoid long holding times for liquid agar and repeated melting of agar.

**Important!** Once melted, pour all the melted agar into plates. Multiple heating or melting should be avoided as the agar will lose its growth supporting and selective characteristics. Never autoclave or sterilize the agar.

Depending on the sample type, the following procedures are recommended:

### A. Clear membrane filtered samples (e.g. clear beer, water) or small sample volumes up to 300 µL, including turbid samples

- Transfer sample onto a Wild Yeast Agar plate.
  - Membrane filter: place filter directly on surface of the agar, taking care not to trap air bubbles between the filter and agar.
  - Liquids: streak direct on agar plate.

### B. Turbid / not filterable samples up to 5 mL (e.g. yeast containing beer or fermenter samples)

1. Pour liquid sample into a sterile Petri dish. The sample volume should not exceed 30% of the total volume of sample + agar volume in the petri dish which means you can use maximum 5 mL liquid sample in a regular 90 mm petri dish.  
For analysis of volumes larger than 5 mL, we recommend use of FastOrange® Wild Yeast Bouillon (SKU 2039-1).
2. Add about twice the volume of melted FastOrange® Wild Yeast Agar (kept liquid at 50°C) to the sample in the petri dish, 10-15 mL per 90 mm petri dish.
3. Mix sample and liquid agar thoroughly by carefully swirling the plate in a horizontal position, then let cool to solidify.

### Incubation conditions

Samples are incubated at 25 °C for wild yeast growth.

For more selective growth of *S. cerevisiae* var. *diastaticus* and other heat tolerant wild yeasts, you may incubate at 37 °C. At this temperature, typical *Saccharomyces* brewing yeast will not grow – excepted KWEIK which preferably grows at higher temperatures than typical *Saccharomyces* brewing yeasts.

Analysis method	Incubation time
Visual inspection	Usually 1-3 days until colonies appear, <i>Brettanomyces</i> in up to 5 days
PCR	Direct PCR from colonies

### Results of visual evaluation

1. Consider your sample to be positive if yeast colonies become visible during the incubation.
2. Verify the presence of wild yeasts using PCR analysis. Refer to the list at the end of the manual for available 4e For everyone PCR Detection Kits for wild yeast detection and/or identification.
3. In our studies with more than 200 tested yeasts, we observed that in rare cases selected Ale yeast strains, particularly English Ale yeasts, may grow on PIKA FastOrange® Wild Yeast Agar.

### We recommend

We recommend initially testing your in-house brewer's yeast strains for their capability to grow on FastOrange® Wild Yeast Agar. In case of growth of a strain in use, always test this strain as pure yeast in parallel to the samples and compare the size and texture of colonies.

Microscopic examination and/or PCR analysis may be used to further characterize and identify the growing yeasts.

For specific detection of *Brettanomyces* yeasts, we recommend use of FastOrange® BRETT Agar (SKU 2037-2).

\* On the medium extremely rare Chloramphenicol resistant bacteria may grow.

### General information

Store the product in the dark at ambient temperature (max. 25°C). Cooling below 25°C is NOT necessary.

Due to manufacturing, slight differences in color of culture medium may occur between bottles. This does NOT influence product quality.

Best before date for unopened products are given on the outer label. After opening we cannot guarantee the shelf life.

The product is not suitable for human or animal consumption. It must not be used for the direct propagation of yeasts which are later used for food production or might get into contact with food.

### PIKA FastOrange® Wild Yeast Products

Wild Yeast Bouillon	(12 x 240 mL)	SKU 2039-1
Wild Yeast Agar	(12 x 170 mL)	SKU 2039-2
Wild Yeast Tubes	(48 x 5 mL)	SKU 2039-10
Wild Yeast Enrichment Bottles	(15 x 40 mL)	SKU 2039-11
Wild Yeast Tubes	(24 x 5 mL)	SKU 2039-15

### PIKA 4e® For everyone Detection Kits

Superattenuator Yeasts Screening	SKU 2402-58
<i>S. cerevisiae</i> var. <i>diastaticus</i> Screening	SKU 2402-49
Dekkera ( <i>Brettanomyces</i> ) sp. Screening	SKU 2402-20
Dekkera ( <i>Brettanomyces</i> ) <i>anomala</i>	SKU 2402-55
Dekkera ( <i>Brettanomyces</i> ) <i>bruxellensis</i>	SKU 2402-54
Dekkera ( <i>Brettanomyces</i> ) <i>naardenensis</i>	SKU 2402-56



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**Notes:** The relevant antibiotics/fungicides contained in the medium fall short of critical values that require monitoring or declaration according to regulation (EG) 1907/2006 (REACH). When properly applied, the medium may be disposed of through the normal waste system. It is strongly recommended to inactivate the live microorganisms in any enriched sample by heating to 121°C/250°F for 20 min (autoclave) to exclude a release of live microorganisms. Although this information was collected thoroughly, we cannot guarantee that any of the content is incomplete or incorrect. We do not take over any warranty for consequences which are resulting from improper handling or incorrect use of this product. Additionally, always comply with the applicable laws, regulations and directives of your country. PIKA Weihenstephan® and FastOrange® are registered trademarks in Germany and other countries.