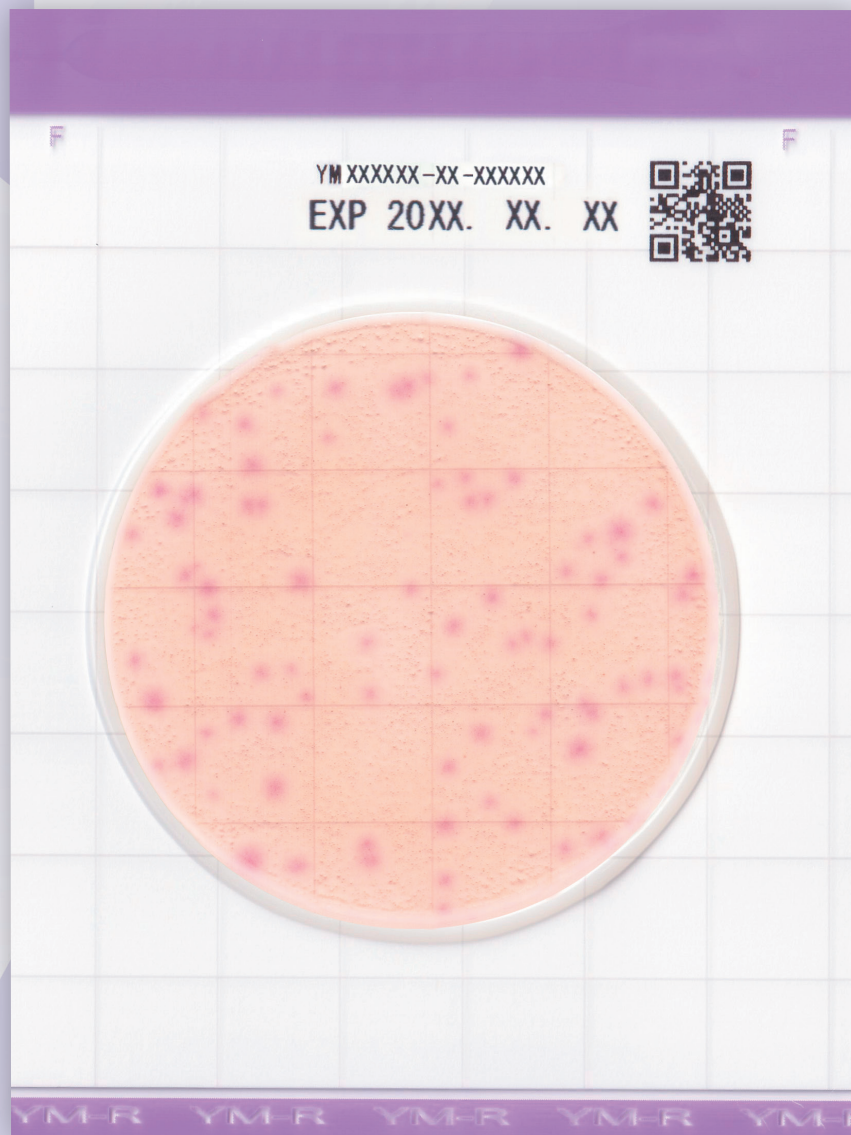


Easy Plate YM-R

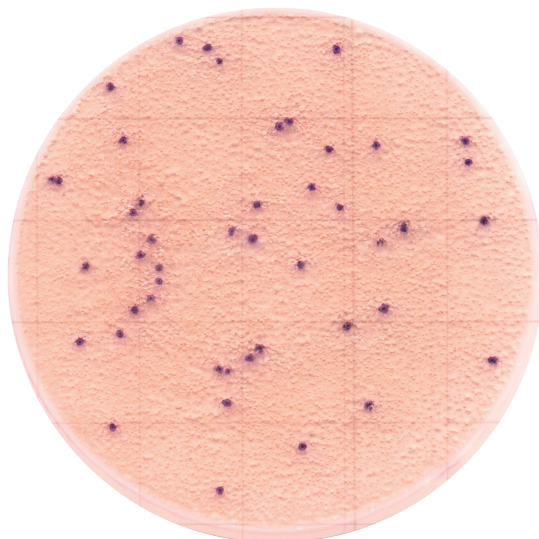
Interpretation Guide



Introduction

Easy Plate is a ready-to-use prepared media plate that eliminates media preparation and sterilization. It offers a convenient alternative to traditional in-house media preparation, saving time, labor, and reducing waste. With approximately 1/20 the volume of a standard petri dish, Easy Plate maximizes incubator space efficiency while enabling more simultaneous tests. Simply open the package, apply your sample suspension, and begin incubation immediately.

Easy Plate YM-R is a microbiological culture device made up of a waterproof sheet, a readymade dry medium on the sheet and a transparent cover over the medium. The Easy Plate YM-R method is intended to indicate the level of yeast and mold in food and beverage products. The chromogenic medium is selective and discriminable for yeast and mold. For exceptional cases, please refer to the inclusivity/exclusivity list in the appendix.



The mold colonies spread widely and form purple colonies with diffuse edges. Yeast colonies form small circles and have defined edges. The suitable colony counting range is 1-150. The test is complete.

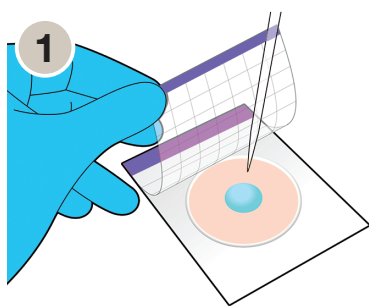
Yeast count = 45

(Image: *Zygosaccharomyces roxii*
NBRC 1914)

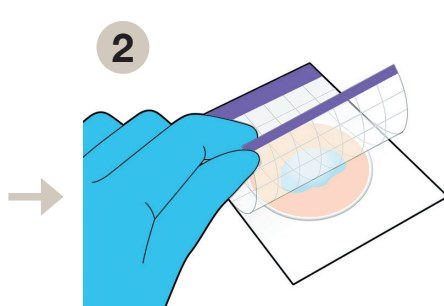
General information

Incubation time	48 - 72 hours
Incubation Temperature	25 ± 1°C
Storage	Store in the refrigerator (2-8°C)
Shelf life	18 months after manufacturing date After opening the package, fold the open end of the package at least 2 times and tape it. Store in a refrigerator (2-8°C) and use within 1 month.
Certification	AOAC PTM, MicroVal, NordVal Certified

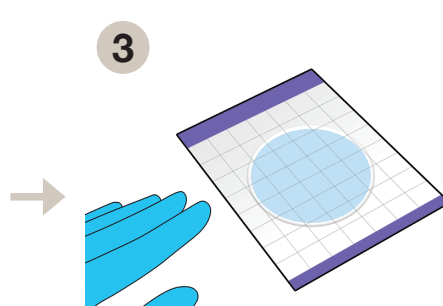
Quick Reminder of How to Use



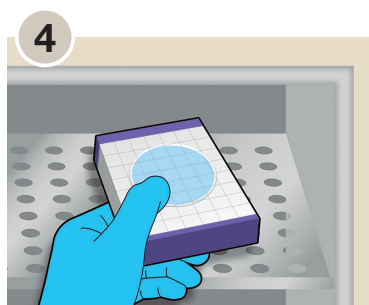
1 Lift the cover and place 1 mL sample suspension onto the center of the plate.



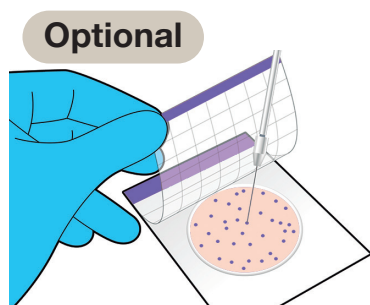
2 Lower the cover onto the sheet and allow the sample to spread evenly.



3 Allow the plate to settle for 3 min or more on a horizontal surface for solidification.



4 Incubate the plate(s) at $25 \pm 1^\circ\text{C}$ for 48 -72 hours. Up to 25 plates can be stacked for space saving and convenience.



Optional

Colony Isolation:

Lift the cover and pick a single colony from the gel.

Note for Sample Diluents and Sample Treatment

■ Use Appropriate Sterile Diluents

Butterfield's Phosphate-Buffered Diluent or appropriate diluents according to ISO 6887.

■ About pH of Sample

This product is basically designed for use with samples that have a pH near neutral. However, if necessary, you can adjust the sample to an appropriate pH for the growth of the target microorganism using a buffer solution.

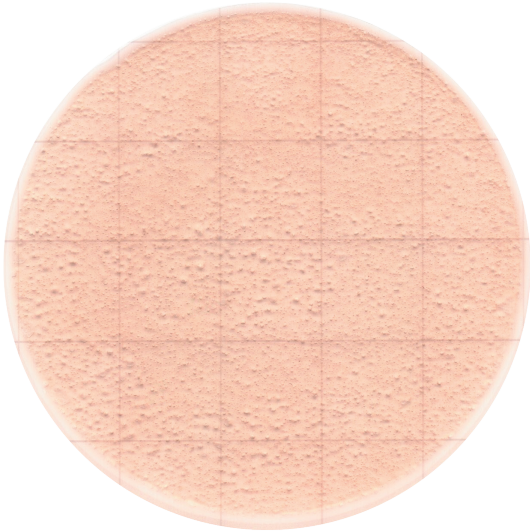
Examples of buffer solutions that can be used for pH adjustment

- Butterfield's Phosphate-Buffered Dilution Water
- Phosphate-Buffered Saline
- Buffered Peptone Water

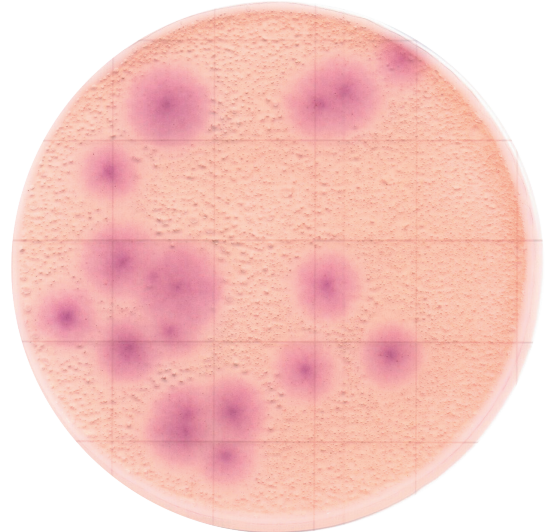
If adjustment is difficult even with the above buffer solutions, 2xBPW and 2xPBS, which have twice the buffering capacity, can also be used.

Interpretation

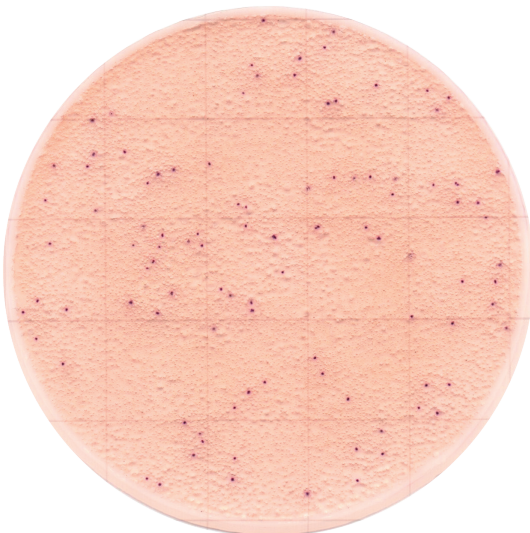
The mold colonies spread widely and form purple colonies with diffuse edges. Yeast colonies form small circles and have defined edges. The suitable colony counting range is 1-150.



Yeast and Mold count = 0
(Image: *Pseudomonas aeruginosa* NBRC 3899)



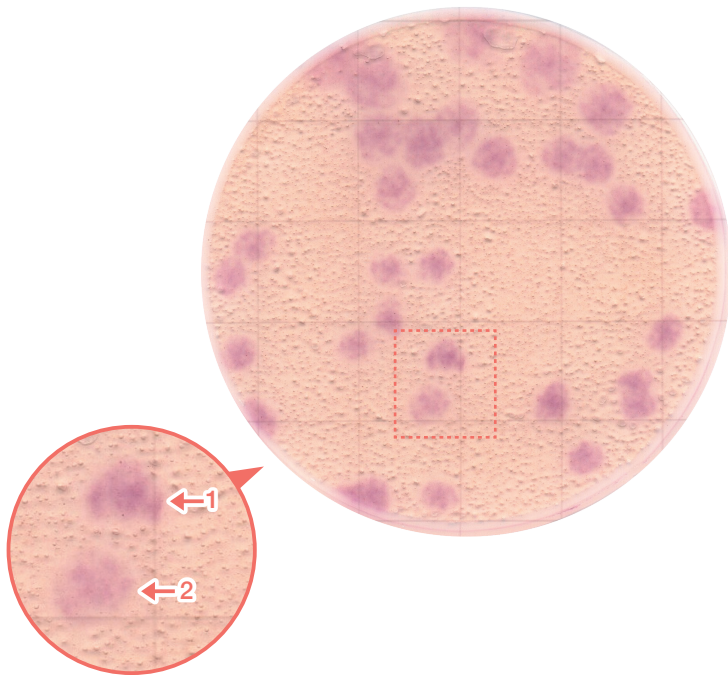
Mold count = 18
(Image: *Fusarium solani* NBRC 9975)



Yeast count = 99
(Image: *Candida albicans* NBRC 1594)

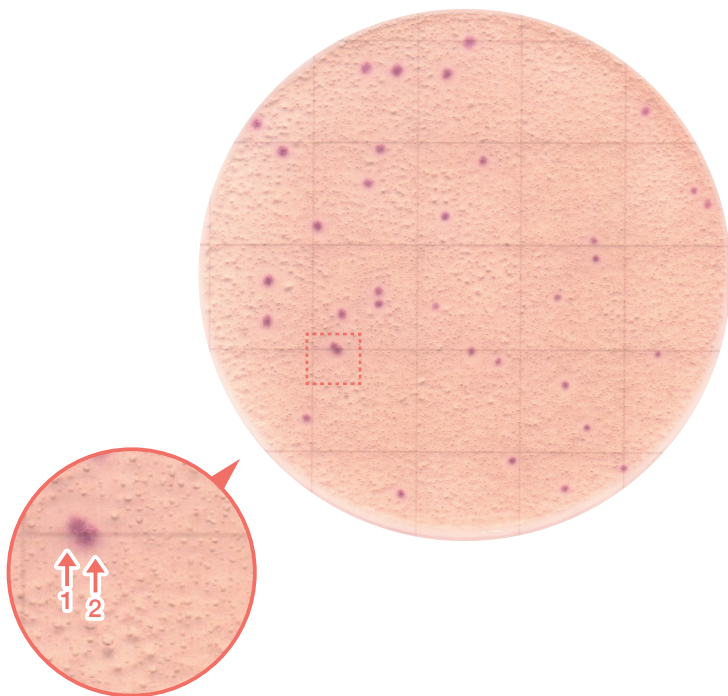


Yeast count = TNTC
(Image: *Candida albicans* NBRC 1594)



Mold count = 31

When a colony is spreading,
count it as one colony.
(Image: pork sausage
+ *Aspergillus niger* NBRC 33023)

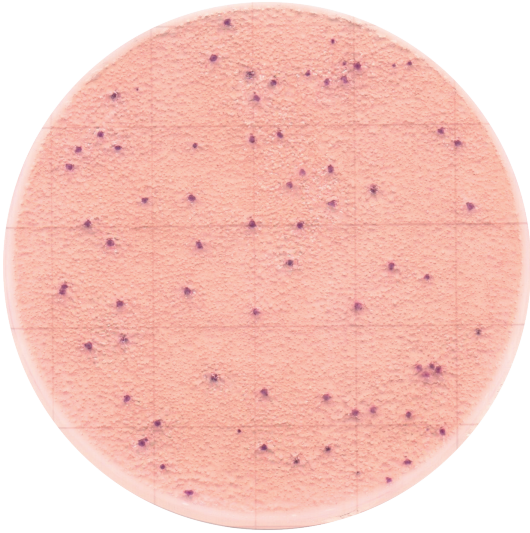


Mold count = 34

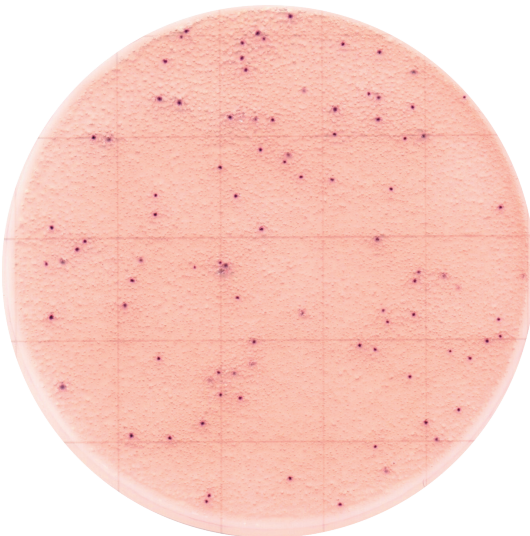
When two or more spreading
colonies appear to originate from
separate sources,
count each source as one colony.
(Image: cheese
+ *Aspergillus niger* NBRC 33023)

Examples of Incubation Result

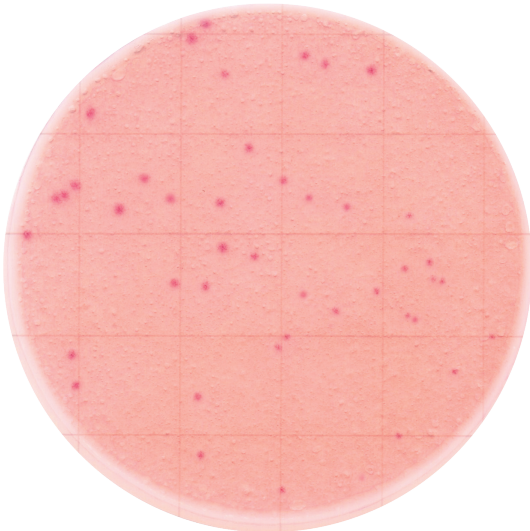
(Dairy Foods)



Yeast count = 71
(Image: yogurt
+ *Saccharomyces cerevisiae* NBRC 100929)

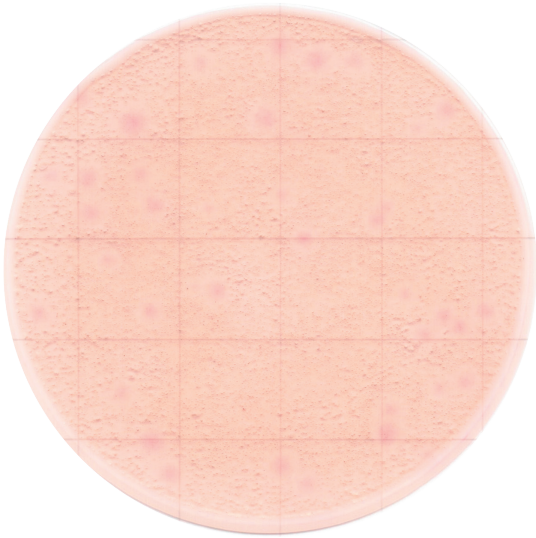


Yeast count = 92
(Image: milk + *Candida albicans* NBRC 1594)

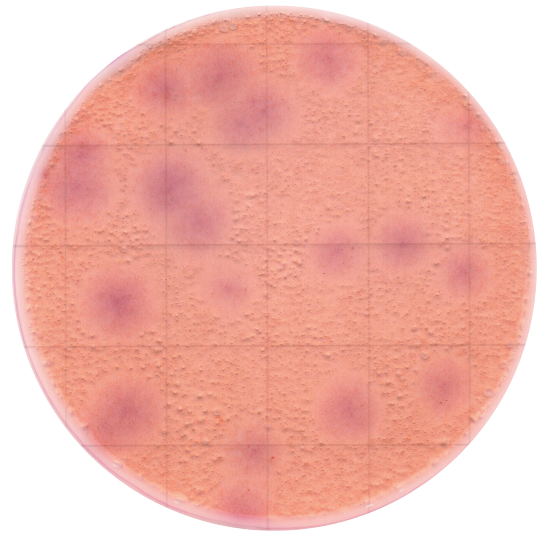


Mold count = 44
(Image: cheese + *Aspergillus niger* NBRC 33023)

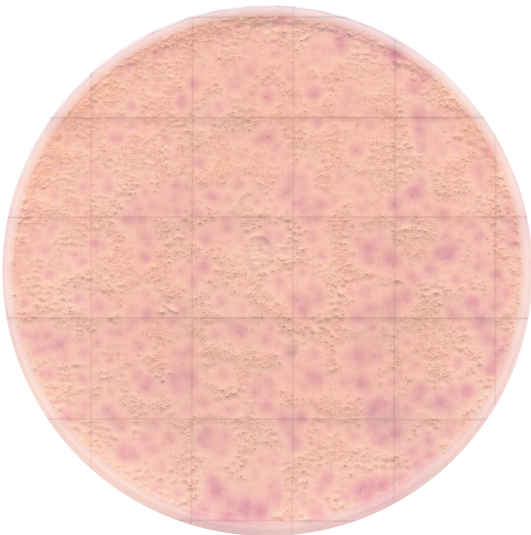
Examples of Incubation Result (Vegetable / Fruit)



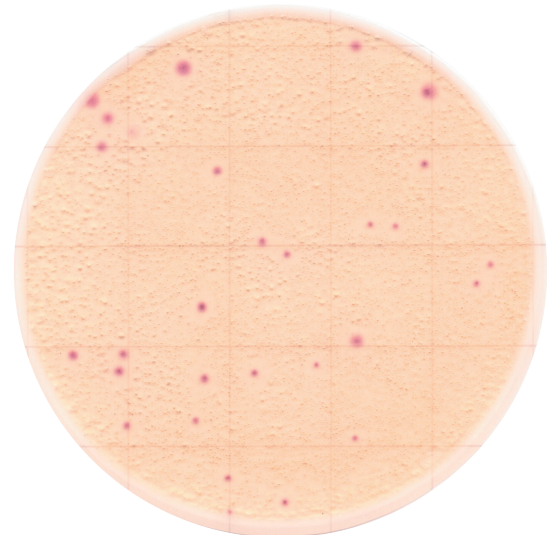
Mold count = 34
(Image: salad + dressing
+ *Paecilomyces variotii* NBRC 114680)



Mold count = 19
(Image: vegetable juice
+ *Byssochlamys spectabilis* NBRC 114679)



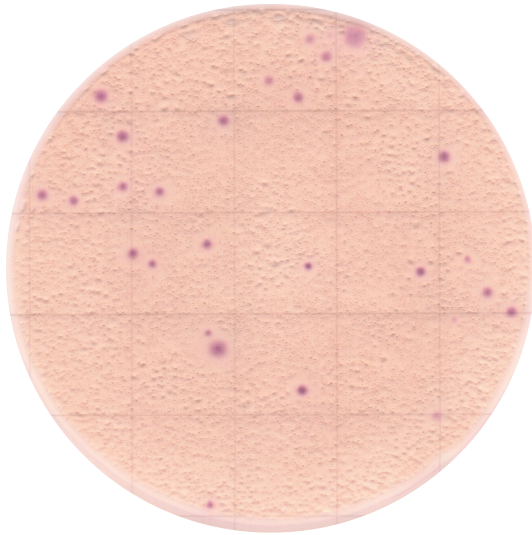
Mold count = 142
(Image: fruits juice
+ *Paecilomyces variotii* NBRC 114680)



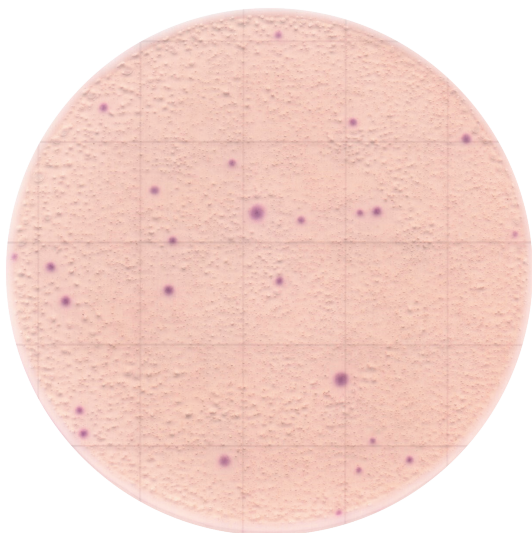
Mold count = 29
(Image: dried pineapple
+ *Eurotium amstelodami* NBRC 31389)

Examples of Incubation Result

(Vegetable / Fruit)



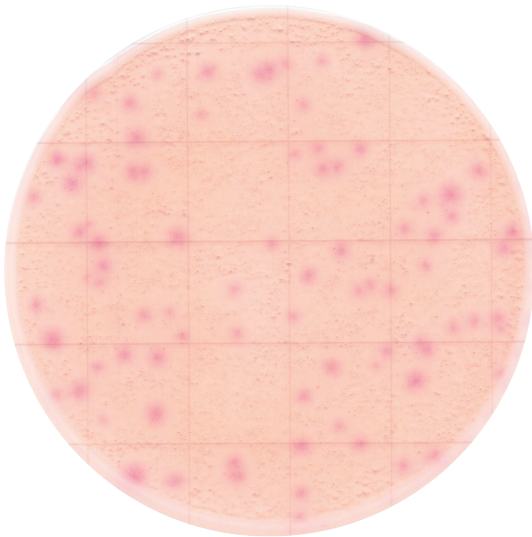
Mold count = 26
(Image: dried mango
+ *Eurotium amstelodami* NBRC 31389)



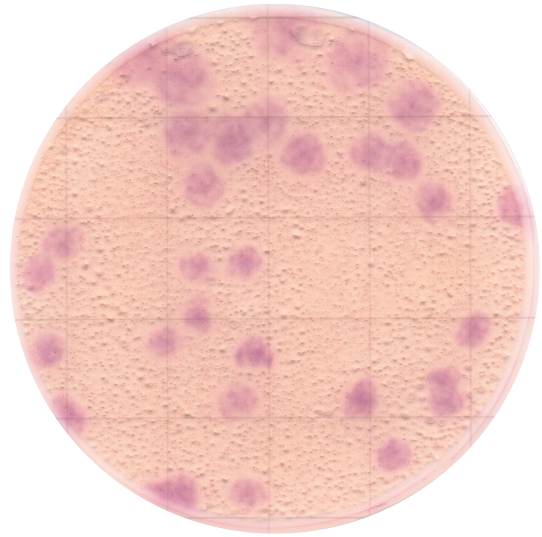
Mold count = 25
(Image: raisin + *Eurotium amstelodami* NBRC 31389)

Examples of Incubation Result

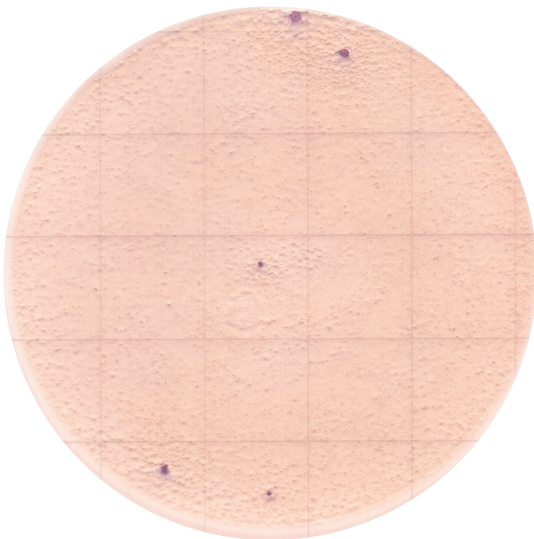
(Meat / Fish product)



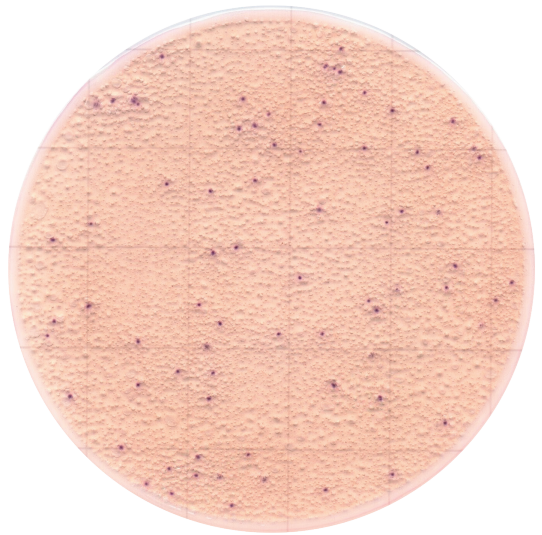
Mold count = 75
(Image: chicken
+ *Penicillium citrinum* NBRC 6532)



Mold count = 31
(Image: pork sausage
+ *Aspergillus niger* NBRC 33023)

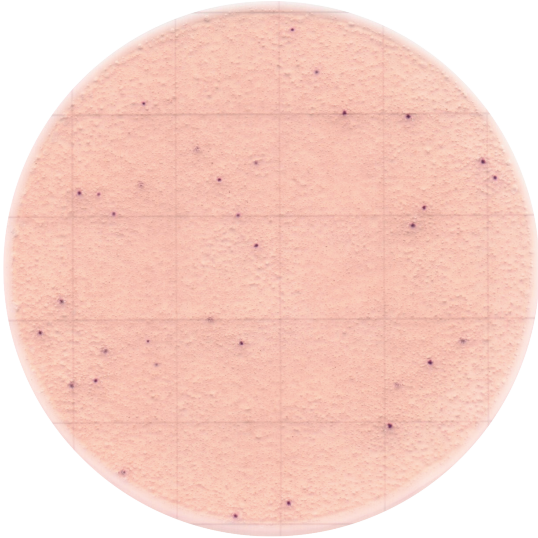


Yeast count = 5
(Image: fish sausage
+ *Saccharomyces cerevisiae* NBRC 100929)

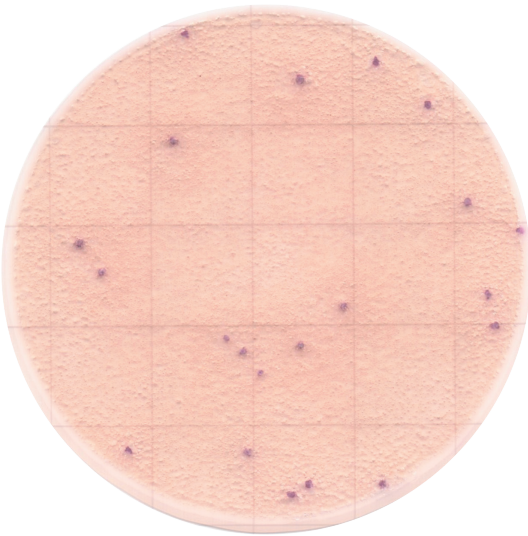


Yeast count = 74
(Image: pork sausage
+ *Candida albicans* NBRC 1594)

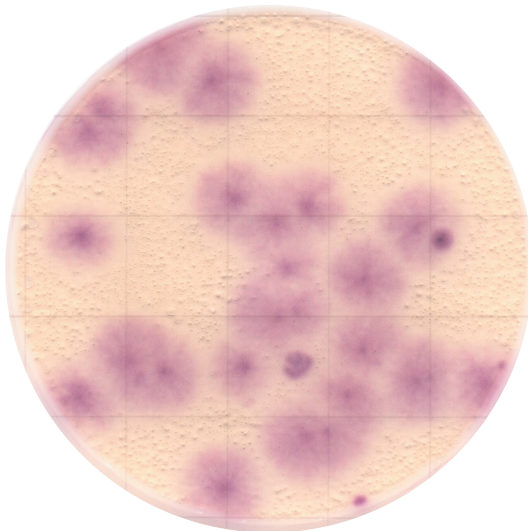
Examples of Incubation Result (Pastry)



Yeast count = 34
(Image: frozen pizza
+ *Candida albicans* NBRC 1594)

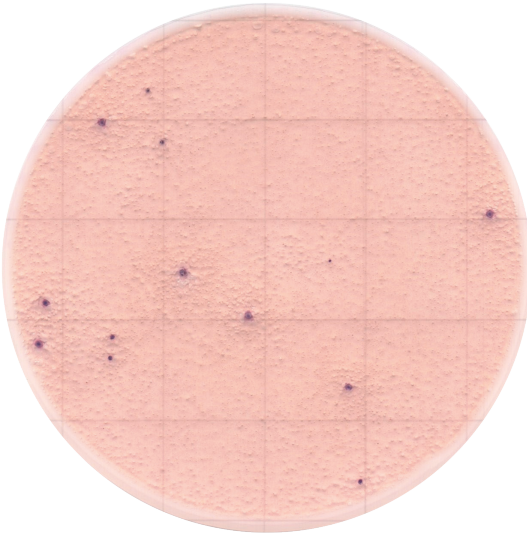


Yeast count = 21
(Image: bun with custard cream filling
+ *Saccharomyces cerevisiae* NBRC 100929)

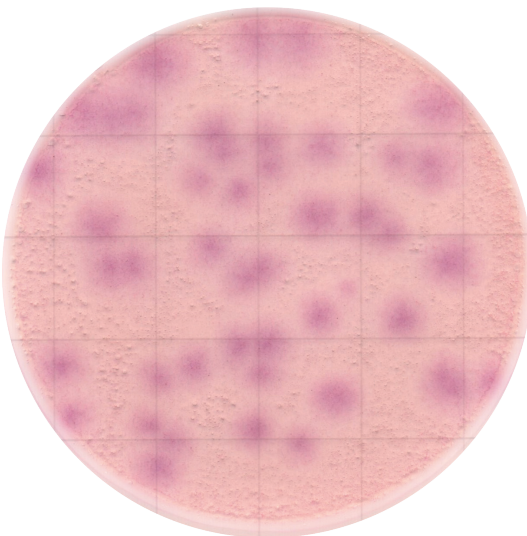


Mold count = 30
(Image: pancake mix
+ *Fusarium solani* NBRC 9975)

Examples of Incubation Result (Other)



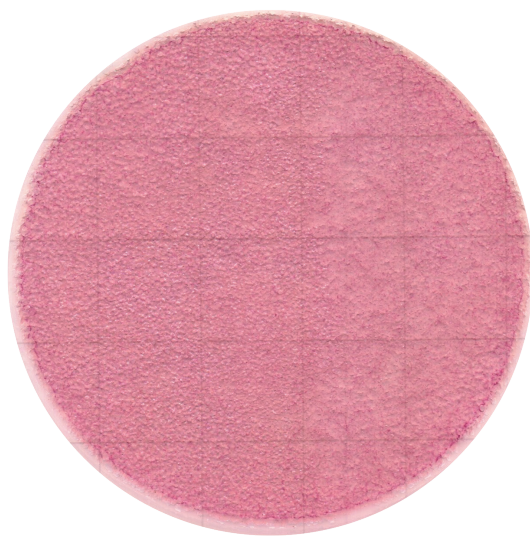
Yeast count = 13
(Image: almond butter
+ *Zygosaccharomyces roxii* NBRC 1914)



Mold count = 42
(Image: coconut milk
+ *Paecilomyces variotii* NBRC 114680)

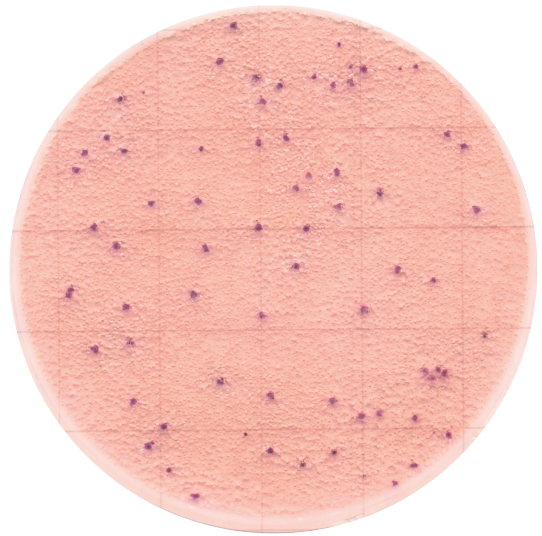
Troubleshooting for counting colonies

A) When the entire growth area becomes purple due to food components involving the chromogenic reaction, prepare a higher dilution.



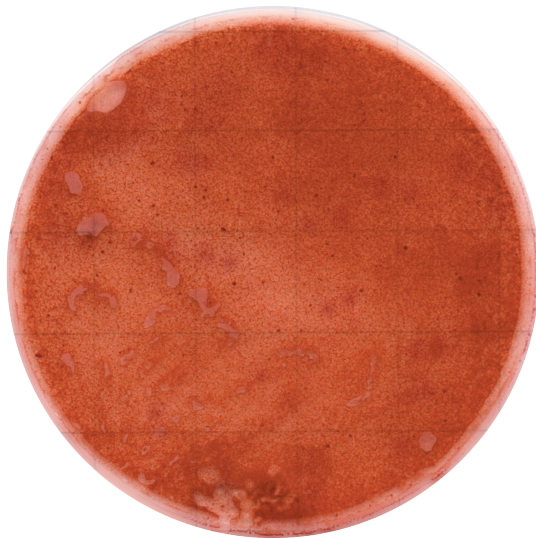
Yeast count = NC
(Image: $\times 10$ diluted yogurt
+ *Saccharomyces cerevisiae* NBRC 100929)

Dilute $\times 10$



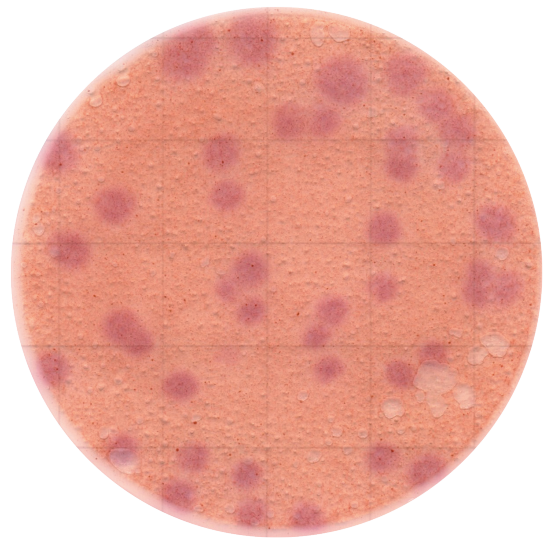
Yeast count = 71
(Image: $\times 100$ diluted yogurt
+ *Saccharomyces cerevisiae* NBRC 100929)

B) When the sample is not clear (i.e. cloudy or dark), prepare a higher dilution.

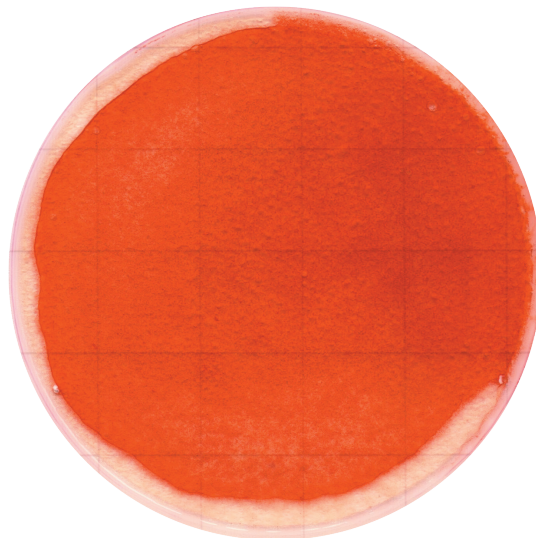


Mold count = NC
(Image: $\times 10$ diluted chocolate
+ *Aspergillus niger* NBRC 33023)

Dilute $\times 5$

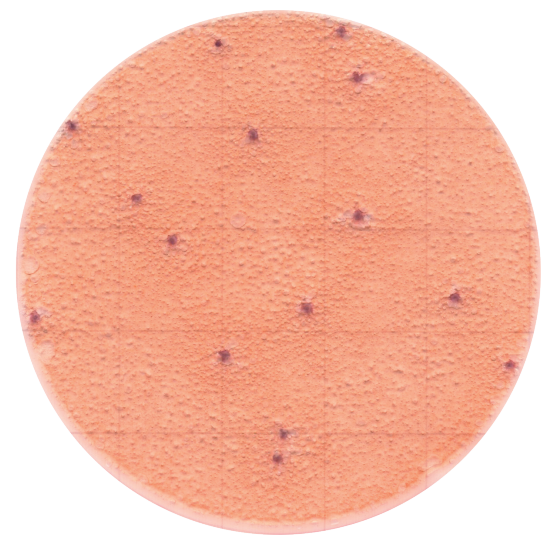


Mold count = 42
(Image: $\times 100$ diluted chocolate
+ *Aspergillus niger* NBRC 33023)



Yeast count = NC
(Image: vegetable juice
+ *Saccharomyces cerevisiae* NBRC 100929)

Dilute $\times 10$



Yeast count = 15
(Image: $\times 10$ vegetable juice
+ *Saccharomyces cerevisiae* NBRC 100929)

If the sample has high viscosity and does not spread completely over the culture area, diluting it will make it easier to spread over the entire culture area.

Easy Plate YM-R-Validation

■ AOAC (Certification No. 122401)

• Reference method:

ISO 21527:2008 : Microbiology of food and animal feeding stuffs-Horizontal method for the enumeration of yeasts and molds.

• Validation range:

Fermented yogurt drink, cream cheese, vegetable juice, beetroot salad, cooked breaded chicken patties, deli turkey, quiche (ham and cheese), custard tart, caesar salad, frozen ready-to-cook pizza, Norwegian style smoked salmon, dried apricots, almond butter, milk chocolate, cream puffs, dry dog food, meat and bone meal, stainless steel and sealed concrete.

■ MicroVal (Certification No. 2022LR109)/ NordVal (Certificate No. 063)

• Reference method:

ISO 16140-2:2016 : International standard that provides a method for validation of alternative methods.

ISO 21527:2008 : Microbiology of food and animal feeding stuffs-Horizontal method for the enumeration of yeasts and molds.

• Validation range:

A broad range of food. (category: Heat processed milk and dairy products, fresh produce and fruits, multi component foods or meal components, bakery products. RTE/RTRH meat and poultry products, dried cereals fruits nuts seeds and vegetables, chocolate, and confectionary, petfood and animal feed and Environmental samples (food or food production. Total 135 samples.)

• Colony Counting System for Easy Plate • Feeder for Easy Plate

Simpler, time-saving way to count colonies that eliminates the effects of variation and skill level among operators. With the Feeder for Easy Plate, batch scanning is available.

*Requires use of the scanner ADS-4300N by BROTHER INDUSTRIES,LTD. for imaging Easy Plate. Scanner sold separately.



For more product information, visit our website:
<https://biochemifa.kikkoman.com/e/kit/product/easy-plate/>



User's Responsibilities:

Kikkoman Biochemifa Company Easy Plate performance has not been validated for all microbial flora, incubation condition, and food matrix combinations. Users must confirm that their test methods and results meet their own requirements. Please note that printer settings may influence the image and color quality if this Interpretation Guide is reprinted.

For comprehensive information regarding CAUTIONS, DISCLAIMER OF WARRANTIES/LIMITED REMEDY, LIMITATION OF LIABILITY, STORAGE AND DISPOSAL, and INSTRUCTIONS FOR USE, please consult the product instructions.

Easy Plate is the registered trademark of Kikkoman Corporation in Japan and other countries.

kikkoman
Kikkoman Biochemifa Company

2-1-1 Nishi-Shinbashi, Minato-ku,
Tokyo 105-0003, Japan
Info-biochemifa@mail.kikkoman.co.jp
<https://biochemifa.kikkoman.com/e/kit/>
©2026 Kikkoman Corp. (6012Y260701)

Follow us on
social media!



Prepared media plate

Easy PlateTM YM-R

Inclusivity and Exclusivity

• Inclusivity

	Strain name ^a	Source ^b	Results ^c			
			Easy Plate YM-R 48h	Easy Plate YM-R 72h	DRBC	DG18
Yeast	<i>Aureobasidium pullulans</i>	CRA 16148	+	+	+	+
	<i>Candida krusei</i>	CRA 629	+	+	+	+
	<i>Candida magnoliae</i>	CRA 8611	+	+	+	+
	<i>Candida sojae</i>	CRA 16138	+	+	+	+
	<i>Candida wyomingensis</i>	CRA 16144	+	+	+	+
	<i>Clavispora lusitanae</i>	CRA 15967	+	+	+	+
	<i>Cryptococcus laurenti</i>	CRA 16139	+	+	+	+
	<i>Cryptococcus uzbekistanensis</i>	CRA 15967	+	+	+	+
	<i>Debaryomyces hansenii</i>	CRA 16833	+	+	+	+
	<i>Dekkera naardensis</i>	CRA 3237	+	+	+	+
	<i>Hanseniaspora uvarum</i>	CRA 15958	+	+	+	+
	<i>Hansenula anomala</i>	CRA 626	+	+	+	+
	<i>Issatchenkia orientalis</i>	CRA 16164	+	+	+	+
	<i>Kloeckera apiculata</i>	CRA 6412	+	+	+	+
	<i>Kluyveromyces lactis</i> var. <i>lactis</i>	CRA 16455	+	+	+	+
	<i>Kluyveromyces marxianus</i>	CRA 6749	+	+	+	+
	<i>Metschenikowia pulcherrima</i>	CRA 16167	+	+	+	+
	<i>Pichia anomala</i>	CRA 4901	+	+	+	+
	<i>Pichia galeiformis</i>	CRA 16015	+	+	+	+
	<i>Rhodotorula graminis</i>	CRA 16003	+	+	+	+
	<i>Saccharomyces bayanus</i>	CRA 16434	+	+	+	+
	<i>Saccharomyces cerevisiae</i>	CRA 720	+	+	+	+
	<i>Saccharomyces exiguus</i>	CRA 16017	+	+	+	+
	<i>Torulaspora delbruekii</i>	CRA 16154	+	+	+	+
	<i>Trichosporon coremiiforme</i>	CRA 15962	+	+	+	+
	<i>Trichosporon jirovecii</i>	CRA 15964	+	+	+	+
	<i>Willopsis saturnas</i>	CRA 6423	+	+	+	+
	<i>Yarrowia lipolytica</i>	CRA 16146	+	+	+	+
	<i>Zygosaccharomyces bailii</i>	CRA 16125	+	+	+	+
	<i>Zygosaccharomyces rouxii</i> *	CRA 16128	+	+	+	+
Mold	<i>Aspergillus brasiliensis</i>	CRA 17002	+	+	+	+
	<i>Aspergillus niger</i>	CBS 119559	+	+	+	+
	<i>Aspergillus restrictus</i> *	ATCC 62693	+	+	+	+
	<i>Botrytis cinerea</i>	CRA 6728	+	+	+	-
	<i>Byssosclamyces fulva</i>	CRA 16668	+	+	+	+
	<i>Byssosclamyces spectabilis</i>	CRA 17025	+	+	+	+
	<i>Eurotium amstelodami</i> *	DSM 62629	-	+	+	+
	<i>Eurotium chevaleri</i> *	CABI 345800	+	+	+	+
	<i>Fusarium proliferatum</i>	CRA 16816	+	+	+	+
	<i>Fusarium solani</i>	CRA 16976	+	+	+	+
	<i>Geotrichum conidium</i>	CRA 14398	+	+	+	+
	<i>Monascus ruber</i>	CRA 16725	+	+	+	+
	<i>Neosartorya fischeri</i>	CRA 16669	+	+	+	+
	<i>Paecilomyces variotii</i> *	CRA 16670	+	+	+	+
	<i>Penicillium aurantigriseum</i>	CRA 16192	+	+	+	+
	<i>Penicillium crustosum</i>	CRA 16671	+	+	+	+
	<i>Penicillium expansum</i>	CRA 16672	+	+	+	+
	<i>Penicillium roqueforti</i>	CRA 16726	+	+	+	+
	<i>Wallemia sebi</i> *	CABI 37338	+	+	nt	+
	<i>Xeromyces bisporus</i> *	CRA 17179	+	+	nt	+

^a Strain with (*): Xerophilic species

^b CRA = Camden BRI Culture Collection (Chipping Campden, UK);

CBS = Fungal and yeast collection - Westerdijk Fungal Biodiversity Institute (Utrecht, the Netherlands);

ATCC = American Type Culture Collection (Manassas, VA);

DSM = German Collection of Microorganisms and Cell Cultures of the Leibniz Institute (Braunschweig, Germany); and

CABI = Centre for Agriculture and Bioscience International (Wallingford, UK).

^c (+): Positive, (-): Negative, (nt): Not Tested.

* These results are just examples and may vary depending on the condition of the strain, culture conditions, etc.

* Incubation conditions

Easy Plate YM-R: 25±1°C, 48 hours/ 72hours

DRBCA and DG18: 25±1°C, 5days / 7days

(Results were same between 2 timepoints)

Dilution solution: PW (Peptone water)

• Exclusivity

Strain name	Source ^a	Results ^b		
		Easy Plate YM-R 72h	DRBC	DG18
<i>Acinetobacter calcoaceticus</i>	CRA 7421	-	+	-
<i>Allicyclobacillus acidoterrestris</i>	CRA 5331	-	-	-
<i>Asaia siamensis</i>	CRA 16653	-	+	+
<i>Bacillus amyloliquefaciens</i>	CRA 6317	-	-	-
<i>Bacillus coagulans</i>	CRA 16020	-	-	-
<i>Bacillus subtilis</i>	CRA 16597	-	-	-
<i>Brochothrix thermosphacta</i>	CRA 16019	-	-	-
<i>Burkholderia cepacia</i>	NCTC 10661	-	+	-
<i>Carnobacterium divergens</i>	CRA 3190	-	-	-
<i>Citrobacter freundii</i>	CRA 3659	-	-	-
<i>Enterobacter agglomerans</i>	CRA 1488	-	-	-
<i>Enterococcus faecium</i>	CRA 16465	-	-	-
<i>Flavobacterium resinovorum</i>	NCIMB 8767	-	-	-
<i>Lactobacillus buchneri</i>	CRA 16628	-	-	-
<i>Lactobacillus plantarum</i>	CRA 561	-	-	-
<i>Leclercia adecarboxylata</i>	CRA 5121	-	-	-
<i>Leuconostoc mesenteroides</i>	CRA 16023	-	-	-
<i>Listeria ivanovii</i>	CRA 1123	-	-	-
<i>Micrococcus luteus</i>	CRA 3503	-	-	-
<i>Morganella morganii</i>	CRA 7533	-	-	-
<i>Pediococcus pentosaceus</i>	CRA 16030	-	-	-
<i>Proteus mirabilis</i>	CRA 1588	-	-	-
<i>Proteus vulgaris</i>	CRA 1581	-	-	-
<i>Providencia rettgeri</i>	NCTC 7475	-	-	-
<i>Pseudomonas fluorescens</i>	CRA 7504	-	+	+
<i>Pseudomonas syringae</i>	NCIMB 11056	-	-	-
<i>Serratia marcescens</i>	CRA 1521	-	-	-
<i>Shewanella putrefaciens</i>	NCTC 13547	-	-	-
<i>Sphingomonas aquatilis</i>	NCIMB 14152	-	-	-
<i>Streptococcus lactis</i>	CRA 561	-	-	-

^a CRA = Campden BRI Culture Collection (Chipping Campden, UK);
 CBS = Fungal and yeast collection - Westerdijk Fungal Biodiversity Institute (Utrecht, the Netherlands);
 ATCC = American Type Culture Collection (Manassas, VA);
 DSM = German Collection of Microorganisms and Cell Cultures of the Leibniz Institute (Braunschweig, Germany); and
 CABI = Centre for Agriculture and Bioscience International (Wallingford, UK).

^b (+): Positive, (-): Negative, (nt): Not Tested.

* These results are just examples and may vary depending on the condition of the strain, culture conditions, etc.

* Incubation conditions
 Easy Plate YM-R: 25±1°C, 72hours
 DRBCA: 25±1°C, 2 days / 5days
 DG18: 25±1°C, 5days / 7days
 Dilution solution: PW (Peptone water)



Kikkoman Biochemifa Company

2-1-1 Nishi-Shinbashi, Minato-ku, Tokyo 105-0003, Japan

E-mail: biochemifa@mail.kikkoman.co.jp

URL: <https://biochemifa.kikkoman.com/e/>

*The information contained in this catalog may change without notice.

©2025 Kikkoman Corp. (6012Y250201)