

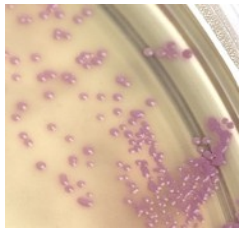
## TYPICALLY IDENTIFIED BACTERIA

### Side #1 Gram Positive (+)    Side 2- Gram Negative (-)

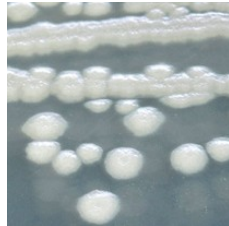
Enterococcus  
Staph Saprophyticus  
Listeria Monocytogenes  
Strep Agalactiae  
Staph Aureus  
Staph Equi

E. coli  
Klebsiella  
Proteus  
Pseudomonas  
Citrobacter spp.  
Enterobacter

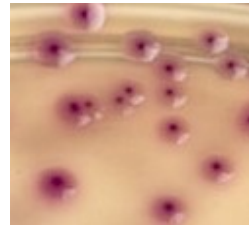
The following is a pictorial representation of just some of the bacteria confirmed and identified by the MultiChrome bi-plate. Some bacteria may look slightly different than those shown in these pictures due to inoculation methods. Additional bacterial images are being added at our web site at [www.KaceyDiagnostics.com](http://www.KaceyDiagnostics.com). **A free laminated reference chart is available. Please call 1.828.685.3569**



S. Saprophyticus (+)



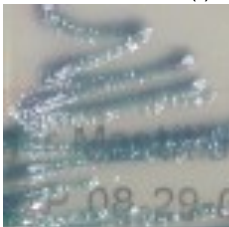
Pseudomonas (-)



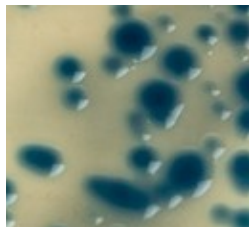
E.Coli (-)



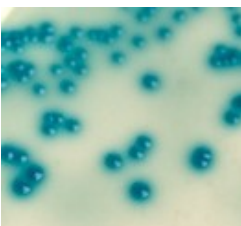
Staph aureus. (+)



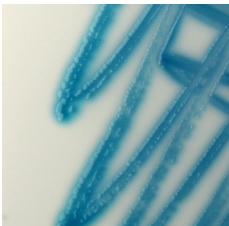
Citrobacter spp. (-)



Klebsiella (-)



Enterococcus (+)



Listeria (+)



Proteus (-)

RE-ORDER PART# KCMC-5 ( FIVE TESTS PER KIT ) KCMC-10 ( TEN TEST PER KIT )

Data on file, Kacey® Asheville, N.C. 28801. Clinical Diagnostics and Management by Laboratory Methods, eighteenth Edition, John Bernard Henry -Editor. W.B. Saunders Company, Philadelphia 1991. Young, D.L. et. Al, Effects of Drugs on Clinical Laboratory tests, AAC Press Wash., D.C. 1990.



1854 A Hendersonville Rd, Asheville, NC 28803, Ph: 1.828.685.3569, Fax: 1.828.685.3571  
[www.KaceyInc.org](http://www.KaceyInc.org)



Color Specific Detection And Identification of Common  
Pathogenic Bacteria...In 24 Hours!

## SUMMARY & INTENDED USE

The KACEY® MultiChrome is a color specific test for the detection and the Identification of common pathogenic bacteria in 24 hours. The Multichrome product is a very specific chromogenic agar used for the growth, colony size and the specific differentiation of both gram positive and gram negative bacteria. The MultiChrome product utilizes for identification the color of the bacteria colony and also the morphological properties of the bacteria. There have been specific products that are embedded into the media on each side of the bi-plate to assist in the growth of gram negative bacteria on one side of the bi-plate and different chemical properties embedded into the other side for the rapid growth of gram positive and yeast.

## CHEMICAL COMPOSITION BY PERCENTAGE OF WEIGHT

Multichrome coloring agent ( Chromogenic Compounds ):40%  
Petones: 20%  
Selective Chemicals Agents: 8%  
Media: 33%

## STORAGE & HANDLING ( Refrigerate – 2-8° C.)

1. Refrigeration is Required **Do Not Freeze**
2. Keep product away from heat & direct sunlight as this product is both heat and light sensitive.
3. DO NOT USE if cracks, shrinking, or pronounced discoloration appear as this would indicate contamination or deterioration . Never perform a test after the expiration date has expired on the MultiChrome test bi-plate.
4. The expiration date on this product is 6 months from the date of manufacturing.
5. The product must remain in its protective enclosure once taken out of the enclosure and opened it must be used or discarded. If the enclosure seal has not been broken it may be placed back into the refrigerator providing it has not been exposed to excess heat. If in doubt discard the test.



## **PROCEDURE**

The MultiChrome product can be used for a variety of tests regarding the different bacteriology investigations that may be warranted based on the animals conditions. Here is a listing of those areas that the MultiChrome System can render the positive identification of the bacteria associated with these areas. A pictorial explanation is also included to help in the identification of the bacteria associated with the site of the infection.

### **MultiChrome can test for:**

1. CONJUCTIVAL INFECTIONS
2. GENITAL INFECTIONS
3. WOUND /ABCESS PATHOGENS
4. UPPER RESRITORY INFECTIONS
5. URINARY TRACT INFECTION (UTI)
6. OUTER EAR INFECTIONSS
- 7 SKIN INFECTIONS
8. MASTITIS
9. SEPTICEMIA

## **PRINCIPLE OF THE TEST**

If there is the presence of bacteria will MultiChrome will interpreted in the following manner. The gram (+) side of the bi-plate will only be able to detect gram (-) bacteria. A special chemical has been added to the gram positive side to inhibit any gram negative bacteria from growing and thus allowing or enhancing only the gram positive bacteria to thrive on that side of the plate. Conversely the Gram (-) side of the plate was been treated with chemicals to inhibit any gram (+) bacteria from growing on that side of the plate thus only allowing gram (-) bacteria to grow. MultiChrome will first confirm the presence of bacteria, followed by separation into their respective gram positive and negative families. Ultimately the bacteria will exhibit a distinctive color through the MultiChrome process. **Example:**

### **Gram Positive Bacteria**

Enterococcus= small, teal to turquoise colonies  
Staph saprophyticus= opaque, pink colonies  
Staph aureus= large, white center with milky white border

### **Gram Negative Bacteria**

E. coli= med size, rose to magenta colonies with darker center  
Pseudomonas a. =light yellow green, translucent with iridescense  
Klebsiella p.=large, dark blue or indigo colonies

(See color chart for common bacteria on last page)



## **SPECIMEN COLLECTION AND PREPARATION**

1. Remove the plate from the refrigerator and allow to warm to room temperature
2. The agar surface of the MultiChrome should be dry before inoculating the sample on to the plate
3. Due to the diversity of bacterial sites it is recommend that you review standard references for the proper collection of the sample at these different collection sites. If these are some concerns regarding infectious material the sample should be immediately tested or protected from excessive heat and cold. It is recommended that if there is a delay in testing, the collected specimen should be properly stored in a sealed container and placed in the refrigerator until inoculation on MultiChrome.
4. The tester should use an inoculating loop ( 20uL) and should immediately inoculate the animals sample onto both sides of the bi-plate by utilizing a streaking motion when placing the sample onto each side. Once the sample has been placed in the bi-plate it should be placed in the incubator upside down( inverted position) and incubated at 37°C +/- 2 degree C for no less then 24 hours . The plate should be examined for colony growth showing both typical morphology and the specific color after 24 hours, but no later than 48 hours after incubation. Yeast growth may require a longer period of time to grow and therefore may require an additional 24 hours or a total of 48 hours for adequate incubation growth to occur. (If using Kacey Micro Incubator see instructions for complete details)

## **PRECAUTIONS**

\*For in vitro diagnostic Veterinary use only.

\*Out of date MultiChrome should never be used to perform a test. Check each plate for the expiration date. Each clinic should abide by their local city, county, and state regulations for the proper disposal of biohazard animal waste.

Use recognized safety protocols when handling cultured MultiChrome media. You are culturing live active bacteria that may be zoonotic. Agents such as leptospirosis, e. coli, s. aureus, etc can be transmitted. Use of gloves, mask or safety shield is recommended. Wash after handling.

