CROMOKIT®

The cromogenic culture media of MICROKIT®

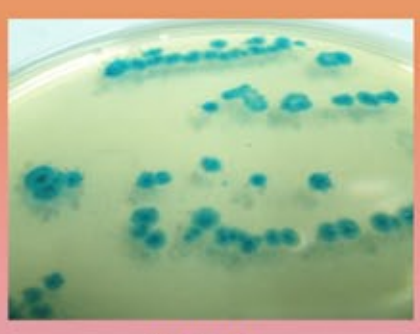
Laboratorios **MICROKIT**® is a pioneer in design and manufacture of a wide variety of chromogenic media for microbiological analysis of food, water, cosmetics, surface and air. Agars and broths made in Spain under ISO 9001 standard since the 90s. Both **dehydrated and ready-to-use** in all versions: tubes, bottles, MF ampoules-vials, hermetic PLAQUIS®, kits P/A-MPN ... These are the advantages:

RAPIDTEST Broth
Different shades of red depending on the total microbial load and hours of incubation:
Negative screening in HACCP

MUGPLUS Cfs. Vanc. Agar
E.coli: Blue-Violet colonies
Rest of coliforms: Red-Pink colonies

MCC Broth for P/A or MPN
Coliforms: Turquoise blue broth
E.coli: Blue fluorescence under 366 nm

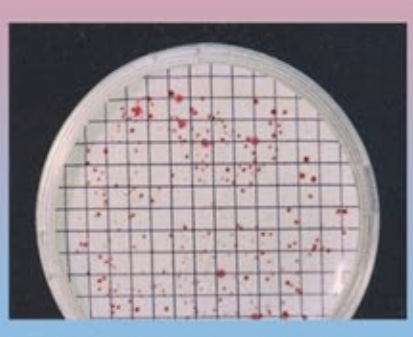
CHROMOSALM Agar
Salmonella spp: Blue-green colonies
Other media false positives (Proteus, Citrobacter, rest of Enterobacteria): Black or colourless colonies



T.B.X. Agar
E.coli: Blue-green colonies

CHROMOCYTOGENES Agar
Listeria spp: Green colonies.
Listeria monocytogenes: reen colonies with halo, Rhamnose+, Xylose-

PCA-Cromogenic Agar



YEA-Cromogenic Nutrient Agar

PCA-MILK-Cromogenic Agar
In all three media, red colonies in contrast with the color of the medium, the sample particles, bubbles and the membrane filters

★ The great advantage of the **CHROMOGENIC AGARS** is they are much more specific and differential than traditional media, since only the colony (and not the media) of the chromogen is colored, so that different colonies overlapping of different strains are distinguished perfectly. The enzyme chromogens are much more specific than the classic stain and pH.

★ The biggest advantage of **CHROMOGENIC BROTHS** is that they provide a rapid screening of negative samples with greater sensitivity than traditional media, warning in less time and with much greater certainty of the presence or absence of target microorganism.

Take advantage of our R & D Department: Our innovation is yours!

Tel: +34 918974616 - Fax +34 918974641
P.O. Box 44, 28210-Madrid-Spain
www.microkit.es
Email: microkit@microkit.es

CROMOKIT®

The cromogenic culture media of MICROKIT®

1991: **RAPIDTEST Broth,** our first cromogenic medium. Allows the detection of aerobic load in record time, by turning broth to red. Therefore it is appreciated in food and chemical industry, for commercial sterility in just 48 hours and to meet the exponential microbial load or bioburden in just 4-24 hours. Correlation between total count and the time to turn to red, although it depends on the type of sample: 10^6 cfu / g, turns into 3-4 hours. 10^5 cfu / g, turns into 7-8 hours. 10^4 cfu / g, turns in 10-12 hours. 10^3 cfu / g, turns in 13-18 hours. If your product cannot take for example, more than 10^4 cfu / g, open the incubator at 12 hours and if there turn (red alert) the product is not valid and if there is not, it is valid. Even faster: the bottom of the tube begins to turn to pink in less hours (study your particular matrix).

1999: **MUGPLUS Cfs-Vanc.Agar**, our first chromogenic agar. *E.coli* grows with blue colonies (X-Glu) and rest of coliforms with pink colonies (Salmon-Gal). Both parameters in the first 18-24 hours and in one single plate! For water by membrane filtration, such as food and cosmetics for mass inoculating. Regarding traditional media such as the Endo and m-FC, and for other modern chromogenic media as Colitag and Coli-Id, the MUGPLUS is the most sensitive, specific, effective, accurate and precise *. An internal study shows 100% correlation with Cromocult. According to the Decree 31-March-2009-BOE 78 about alternative methods in water.

2001: **MCC Broth**. is a Lauryl Sulfate Broth with MUG (*E.coli*: blue fluorescent under 366 nm UVA lamp and indol + in the same tube) and with X-Gal (coliforms: turquoise blue change of broth colour). It allows simultaneous detection of coliforms and *E.coli* in the first 18-24 hours and in the same tube. Durham tubesand later tryptone water are unnecessary. Our best friend for MPN counts when our sample should not have more than 10 cfu / g of coliform or *E.coli*, since in these counts the agars have not enough limit of detection / quantification. Also ideal for detecting presence / absence in 100 or 250 ml of water or colourless drinks (see brochure chromogenic P / A broths). Validated by 15 years of intercolaborative and 10 years of intercomparative studies *.

2002: **CHROMOSALM Agar**. is the most sensible and specific medium for Salmonella detection, which, thanks to the X-α -Gal, grow with green colonies, while other enterobacteria grow, thanks to CHE-Gal, as black or colorless colonies(including the frequent interferences in rest of media, such as Proteus and Citrobacter). Save the days and the cost of the kits needed for confirmation in other media. A intercolaborative study * shows maximum efficiency versus traditional media and other chromogenic Magenta-Gal ones, in all types of food matrixes, feed, water and clinical microbiology. According to ISO 6579.

2003: **T.B.X. Agar**. *E.coli* colonies grow blue-green. This is the TBA medium (ISO 9308-1) to which we added the chromogen X-Glu, the same as in MUGPLUS Agar, specifically for *E. coli*. Designed for samples that do not require the detection of other coliforms. According to the ISO / TC 34/SC9 and ISO / TS 16649-2.

2004: **CHROMOCYTOGENES Agar**. is formulated according to ISO 11290-2004 addenda on Ottaviani and Agosti Agar. Our advantage: is also available in dehydrated version, to allow its use to laboratories that cannot rely on prepared plates of low shelf life. An intercomparative study demonstrates its superior efficiency than Palcam and Oxford agars.

2006: **PCA-Cromogenic Agar**, **PCA-MILK-Cromogenic Agar** y **YEA-Cromogenic Nutrient Agar**. Three agars designed simultaneously, facilitating total aerobic count in foods (AOAC, APHA, Standard Methods, ISO 4833) in milk (FIL) and water (ISO 6222), respectively. Aerobic colonies grow red, allowing such a contrast with the cream media through which the sensitivity is 10% higher, by seeing also tiny colonies. The analyst appreciates stop damaging their sight because of the classic aerobic count. Moreover, the colonies are distinguished from the food particles, bubbles and the membrane filter.

2009: **CANDIDA CROMOKIT Agar**, differential pathogenic species of Candida: *C. albicans* colonies growing light blue, *C.tropicalis* with violet colonies and *C. krusei* with purple colonies. Like other clinical media, effectiveness in cosmetic samples is not the adequate.

2009: **CRONO-ENTEROBACTER SAKAZAKII Agar** to detect this dangerous pathogen of infants in baby foods and other products. It grows with blue-green great colonies, other enterobactyeria with purple colonies.

2009: **ENTEROCOCCUS CROMOKIT Agar**. Although this is the most robust parameter in drinking water microbiology, it is not in bathing water, marine waters, brackish ... where traditional media suffer many interferences. Endorsed even in food for the Environmental Protection Agency. Blue colonies, tiny, are confirmed as fecal enterococci.

2009: **CROMOKIT UTI Agar**. CLED Agar Base with chromogens that make true differential for the responsible microorganisms of the Urinary Tract Infections: rose colonies: *E.coli*, turquoise colonies: Enterococci, indigo colonies: *Enterobacter aerogenes, Klebsiella pneumoniae*, gray-white colonies: *Staphylococcus aureus*, cream - brown colonies: Proteus, Morganella, Providencia. The use of this medium is a priori very attractive to other matrixes (food, water, medicines, cosmetics, surfaces, air ...), because of its usefulness as presumptive distinction of species by color, but as all clinical media, must first be validated for each particular matrix (eg, vegetables, dairy, meat ...).

*** all publications that support the results discussed in this brochure are available on our website www.microkit.es**