

Catalog No. M-0100

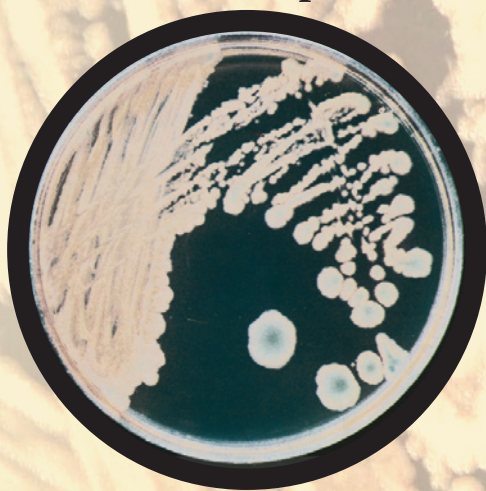


U.S. Patent 7,309,580

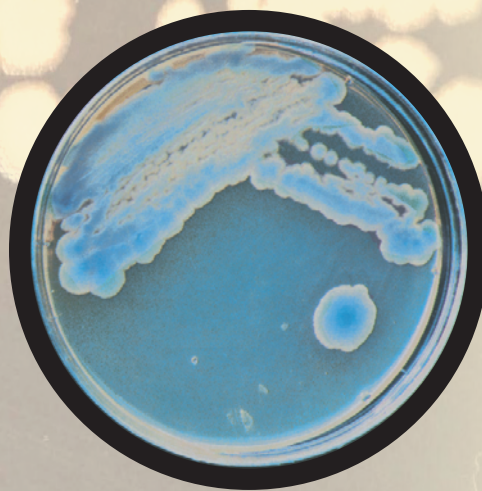
## R & F<sup>®</sup> *Anthraxis* Chromogenic Agar

A Differential/Selective Chromogenic Medium For The Rapid Identification And Isolation Of *Bacillus anthracis* Based On The Detection Of Phosphatidylcholine-Specific Phospholipase C Activity By 5-Bromo-4-Chloro-3-Indoxyl-Cholinephosphate Hydrolysis.

Presumptive Positive Colonies of *Bacillus anthracis*



Cream to pale teal-blue-Colored Colonies of *Bacillus anthracis* after 20-24 hours at 35-37°C



Teal-Blue Colonies of *Bacillus anthracis* after 36-48 hours at 35-37°C



Dark Teal-Blue Colonies of *Bacillus cereus*/*Bacillus thuringiensis* after 20-24 hours at 35-37°C

Product contains BIOSYNTH AG  
patented substrate (U.S. Patent 6,600494)

**Table: Selective and Differential Properties of R & F® *Anthraxis* Chromogenic Agar**

Bacteria	No. of strains	Colony morphology color and diam. @ 37°C	
		24 h	48 h
<i>Bacillus anthracis</i> *	16	cream or pale teal-blue with thick cream rim**, 2-5 mm	teal-blue with thick cream rim, 6 mm
<i>Bacillus cereus</i>	2	dark teal-blue with thin cream rim, 6 mm	dark teal-blue with thin cream rim, 6 mm
<i>Bacillus thuringiensis</i>	3	dark teal-blue with thin cream rim, 7 mm	dark teal-blue with thin cream rim, 7 mm
<i>Bacillus subtilis</i>	1	cream, 1-3 mm	cream, 2-5 mm
<i>Bacillus brevis</i>	1	cream, 1-2 mm	cream, 1-2 mm
<i>Bacillus circulans</i>	1	clear, 1-2 mm	white, 1-2 mm
<i>Bacillus sphaericus</i>	1	clear, 1-2 mm	cream, 1-2 mm
<i>Escherichia coli</i>	2	no growth	no growth
<i>Staphylococcus aureus</i>	2	orange or pale yellow, 1-2 mm	vivid orange or yellow, 2-3 mm
<i>Pseudomonas aeruginosa</i>	1	no growth	no growth

\* 13 ATCC *Bacillus anthracis* strains plus Ames-1-RIID, Ames-RIID, and ANR-1 were tested. All possible plasmid combinations (tox+ cap+; tox+ cap-; tox- cap+; tox- cap-) were represented in at least two strains tested.

\*\* Some *Bacillus anthracis* strains exhibit small teal-blue centers after 18 h at 37°C

## Advantages of R & F® *Anthraxis* Chromogenic Agar

- Single-step identification of *Bacillus anthracis*, does not require the use of multiple media for isolation of presumptive *Bacillus anthracis* colonies.
- Readily differentiates *Bacillus anthracis* from related *Bacillus cereus* and *Bacillus thuringiensis* species
- Other *Bacillus* species either form white colonies or do not grow
- Efficient recovery from foods, environmental sources (water, cloth, and paper), and clinical samples
- Reduction of false positives/negatives
- Cost effective stable (45 days) prepared plates
- Confirmed negative within 24 hours; presumptive positive within 48 hours.

### Reference

Gingras, B.A, M.A. Juergensmeyer, R.L. Sherwood, E.W. Frampton, and L. Restaino. 2003. A novel selective chromogenic isolation medium for *Bacillus anthracis*. Paper #201 ASM Biodefense Research Meeting.

Juergensmeyer, M.A., B.A. Gingras, L. Restaino, and E.W. Frampton. 2006. A selective chromogenic agar that distinguishes *Bacillus anthracis* from *Bacillus cereus* and *Bacillus thuringiensis*. *J. Food Prot.* 69:2002-2006.

### ORDERING INFORMATION:

**M-0100 R & F® *Anthraxis* Chromogenic Plating Medium**

**M-0110 R & F® *Anthraxis* Chromogenic Supplement for Plating Medium**

**M-0150 R & F® *Anthraxis* Chromogenic Detection System**

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