# Microbial Detection Using Biolog Chromogenic Media

Rainbow® Agars offer a simple, selective and chromogenic medium to help you conveniently detect strains of *E. coli* 0157, *Salmonella, Shigella* and *Aeromonas* with results in less than 24 hours.

### **RAINBOW AGAR 0157**

Rainbow Agar O157 has both selective and chromogenic properties that make it particularly useful for isolating pathogenic *E. coli* strains. The medium contains chromogenic substrates that are specific for two *E. coli*-associated enzymes: ß-galactosidase (a blue-black chromogenic substrate) and ß-glucuronidase (a red chromogenic substrate). Rainbow Agar O157 is listed in FDA's Bacteriological Analytical Manual (BAM) and presents the agency's preferred laboratory procedures for microbiological analyses of foods and cosmetics.

### **EXPECTED RESULTS**

Organism	<b>Colony Color</b>
E. coli O157:H7	Black or gray
E. coli O157:H7 (glucuronidase+)	Purple-blue
E. coli O26:H11	Purple magenta
E. coli O48:H21	Purple
E. coli O111:H or O111:H8	Violet or gray



### RAINBOW AGAR SALMONELLA

Rainbow Agar Salmonella utilizes an enhanced detection chemistry to determine  $H_2S$  production among *Salmonella* spp.. Black colonies are formed by even weak  $H_2S$  producing strains. In addition, novel selective agents increase the recovery rate of *Salmonella* while inhibiting the growth of other enteric bacteria and inhibiting  $H_2S$  production by *Citrobacter* and other  $H_2S$  positive enteric species.

#### **EXPECTED RESULTS**

Organism	<b>Black Colonies</b>
Salmonella subspecies 1:	
enteritidis	+++
choleraesuis	++
paratyphi A	-
paratyphi C	+
typhi	+/-
gallinarum	-
pullorum	-
Salmonella subspecies 2	+++
Salmonella subspecies 3	+++
Salmonella subspecies 4	+++
Salmonella subspecies 5	+++
Salmonella subspecies 6	+++





### RAINBOW AGAR SHIGELLA / AEROMONAS

Rainbow Agar Shigella/Aeromonas was developed to provide laboratories with a better culture medium for directly isolating pathogenic strains of *Shigella* and *Aeromonas*. The medium is inhibitory to gram-positive bacteria and most non-enteric gram-negative bacteria, but is not toxic to the target species. *Escherichia coli* is significantly inhibited, and colonies that grow are blue.

### **EXPECTED RESULTS**

Organism	Growtl	<b>Growth Colony Color</b>	
Shigella sonnei	Good	Orange-red	
Shigella flexneri	Good	Orange-red	
Shigella boydii	Good	Orange-red	
Shigella dysenteriae	Good	Orange-red	
Aeromonas hydrophila	Good	Orange-red	
Escherichia coli	Partial	Blue	



Biolog has a complete range of products for the identification and characterization of aerobic and anaerobic bacteria, yeast and fungi. Please visit our website at <a href="https://www.biolog.com">www.biolog.com</a> for more information.

## **Ordering Information:**

Catalog #	Description	Unit Size
80102	Rainbow Agar O157	30 g (25 plates)
80202	Rainbow Agar SALMONELLA	47 g (50 plates)
80302	Rainbow Agar SHIGELLA/ AEROMONAS	71.5g (50 plates)

00A 070 Rev A 3/2018



21124 Cabot Blvd Hayward, CA 94545 USA Tel: +510 785 2564 Fax: +510 782 4639

<sup>\*</sup>Not for human in vitro diagnostic use