RAINBOW® AGAR SHIGELLA/AEROMONAS TECHNICAL INFORMATION

BIOLOG

INTENDED USE For laboratory use as a selective, chromogenic culture medium to aid in the detection and isolation of *Shigella* and *Aeromonas* species. Not for human *in vitro* diagnostic use.

SUMMARY OF TEST Rainbow Agar Shigella/Aeromonas was developed to provide laboratories with a better culture medium for directly isolating pathogenic strains of *Shigella* and *Aeromonas*. Species of these genera can be important causative agents of gastroenteritis. 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. Most other enteric species growing on the medium will also form blue colonies. Strains of all four *Shigella* species (*sonnei, flexneri, boydii* and *dysenteriae*) as well as some *Aeromonas* species (*hydrophila, jandaei* and *trucți*) grow as large or medium-sized orange-red colonies. *Shigella* can be preliminarily differentiated from *Aeromonas* with an oxidase test (*Shigella* is oxidase-negative, *Aeromonas* is oxidase-positive).

CONTENTS This sealed packet contains dry powder to make Rainbow Agar Shigella/Aeromonas. 71.5 grams of powder will make 1 liter or approximately 50 plates.

PREPARATION This medium can be prepared in any volume to suit the user's needs. To prepare 1 liter of Rainbow Agar Shigella/Aeromonas, mix 71.5 grams of powder into 1 liter of purified water in a container large enough to hold twice the volume to be prepared. Bring it to a boil in a microwave oven or on a hot plate. Watch the medium as it is heated and as soon as it reaches a full boil, remove it immediately from the heat. The medium is very sensitive to heat and CANNOT BE AUTOCLAVED. Cool agar to 45-50°C before pouring. Dispense approximately 20 ml of media into each petri plate. The medium is ready to use as soon as it has cooled, gelled and the surface has dried. The final medium should be clear and light green in color.

STORAGE Rainbow Agar Shigella/Aeromonas powdered medium is extremely hygroscopic and should be stored at 2°C to 25°C in a dry environment. Unopened packets may be stored in this manner until the expiration date on the label.

USER QUALITY CONTROL The following organisms are recommended if quality control is desired or required. Inoculate Rainbow Agar Shigella/Aeromonas plates with the following strains by streaking for isolation, then incubate for 24 hours at 35°C without elevated CO_2. Colony color should be read from isolated colonies.

Organism	ATCC® number	Color on Rainbow Agar Shigella/Aeromonas
Shigella sonnei	25931	Orange-red
Shigella flexneri	12022	Orange-red
Aeromonas hydrophila	35654	Orange-red
Escherichia coli	25922	Blue

PROCEDURE Inoculate the medium by streaking or spreading a sample suspected of containing *Shigella* or *Aeromonas* on the surface of the medium. Incubate the plates for 20 to 24 hours, or longer, at 35°C without elevated CO_2 and observe for the presence of colored colonies.

EXPECTED RESULTS

Organism	Growth	Colony coloration
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	Partially Inhibited	Blue

LIMITATIONS This medium should not be used as the sole basis for identification of microorganisms. Any colony suspected of being *Shigella* or *Aeromonas* should be tested further to verify its identity using an approved confirmatory protocol.

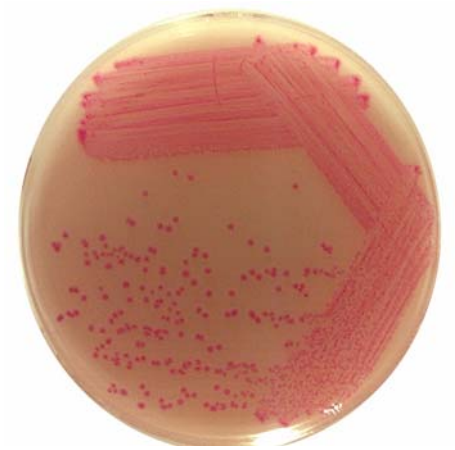
REFERENCES

BIOLOG ORDERING INFORMATION

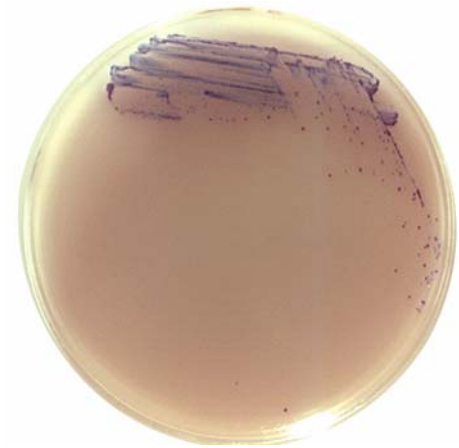
Rainbow Agar Shigella/Aeromonas

Catalog Number	Description
80302	Powder- 71.5 grams

Biolog Order Desk: 800-284-4949
csorders@biolog.com
Biolog Technical Support: 510-785-2564
tech@biolog.com



Shigella sonnei



Escherichia coli

Part# 00P 190, Rev. A, AUG 2008

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