

CHROMagar™ Salmonella Plus

MEDIUM PURPOSE

Chromogenic medium for the isolation of Salmonella species including *S.Typhi* and lactose positive *Salmonella*. This medium meets the ISO 6579 : 2002 ISO norm.

Mainly due to contamination in the food chain and/or during food-production processes, *Salmonella* commonly induces enteric illness whose major symptoms are abdominal cramps, diarrhea, nausea, and vomiting.

Second most important foodborne pathogen, its detection remains a big concern in the medical field, and a big challenge in the food industry including the lactose plus strains largely encountered in the poultry.

COMPOSITION

The product is composed of a powder base (B) , 1 supplement (S) and 1 optional supplement.

Product	=	Base (B)	Supplement (S)	OPTIONAL USE
				White Opaque Supl.
Total g/L		32.8 g/L	6.0 ml/L	1.0 g/L
Composition g/L		Agar 15.0 Peptone and yeast extract 8.0 Salts 8.5 Chromogenic mix 1.3	Growth mix 6.0	
Aspect		Powder Form	Liquid Form	Powder Form
STORAGE		15-30°C	15-30°C	15-30°C
FINAL MEDIA pH		7.5 +/- 0.2		

When and why should I use the White Opaque Supplement?

The white opaque has to be incorporated in the preparation of the medium for an opaque background.

PREPARATION (Calculation for 1L)

Step 1

Preparation of base (B) + (S)

- Disperse slowly 32.8g of powder base in 1L of purified water.
 - Stir until agar is well thickened.
 - Add 6ml of the LIQUID content of the supplement.
 - Swirl for mixing.
- Warning 1:** To obtain a white opaque background, look at Step 2.

OPTIONAL

In order to obtain a white opaque background:

Step 2

Preparation of white opaque background

- Put 1g of the CHROMagar White Opaque supplement reference SU702 in 10 ml purified water.
- Vortex well for homogenization. **Appearance:** milky suspension.
- Add the 10ml to the rehydrated base before the heating step.

Step 3

Heating

- Heat and bring to boil (100°C) while swirling or stirring regularly. DO NOT HEAT TO MORE THAN 100°C. DO NOT AUTOCLAVE AT 121°C.
 - Cool in a water bath to 45-50°C.
- Warning 2:** If using an autoclave, do so without pressure.
- Advice 1:** For the 100°C heating step, mixture may also be brought to a boil in a microwave oven: after initial boiling, remove from oven, stir gently, then return to oven for short repeated bursts of heating until complete fusion of the agar grains has taken place (large bubbles replacing foam).
- Advice 2:** in case of product samples containing a high load of *Pseudomonas* and/or *Aeromonas*, Cefsulodin can be added at 5 mg/L.

Step 4

Pouring

- Swirl or stir gently to homogenize.
- Pour into sterile Petri dishes.
- Let it solidify and dry.

Storage

- Store in the dark before use.
- Prepared media plates can be kept for one day at room temperature.
- Plates can be stored for up to one month under refrigeration (2/8°C) if properly prepared and protected from light and dehydration.

CHROMagar™ Salmonella Plus

Instructions For Use

ENGLISH

Instructions For Use

INOCULATION

Related samples can be processed by direct streaking on the plate, as well as prior appropriate enrichment step (*RambaQUICK Salmonella enrichment broth* is available : reference SQ001).

• If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.

• Streak sample onto plate.

• Incubate in aerobic conditions at 37°C for 18-24 hours.

Typical Samples

e.g. food, meat, fresh eggs, dairy milk products as well as medical samples: blood, stools etc

Possible enrichment step
Direct streaking
or spreading technique

Microorganism

Typical colony appearance

S.abaetuba ATCC® 35640 → mauve

S.typhimurium ATCC® 13311 → mauve

S.enteritidis ATCC® 13076 → mauve

S.arizonae CIP 8230 → mauve

E.coli ATCC® 25922 → colourless

C.freundii ATCC® 8090 → blue

S.aureus ATCC® 25923 → inhibited

P.aeruginosa ATCC® 9027 → inhibited

INTERPRETATION

Microorganism

Typical colony appearance

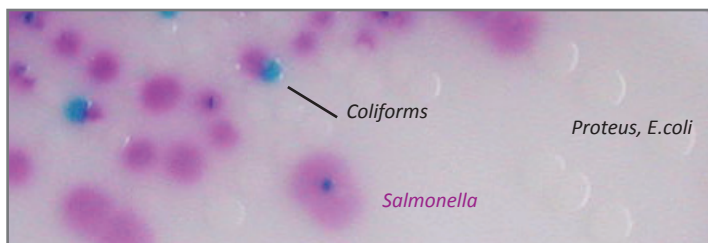
Salmonella (including *S.Typhi*, *S.patyphi* A and lactose positive *Salmonella*) → mauve

E.coli → colourless

Coliforms → blue

Proteus → colourless or inhibited

Typical colony appearance



The pictures shown are not contractual.

WARNINGS

• Do not use plates if they show any evidence of contamination or any sign of deterioration.

• Do not use the product beyond its expiry date or if product shows any evidence of contamination or any sign of deterioration.

• For *in vitro* diagnostic use. This laboratory product should be used only by trained personnel in compliance with good laboratory practices.

• Any change or modification in the procedure may affect the results.

• Any change or modification of the required storage temperature may affect the performance of the product.

• Unappropriate storage may affect the shelf life of the product.

• Recap the bottles/vials tightly after each preparation and keep them in a low humidity environment, protected from moisture and light.

• For a good microbial detection: collection and transport of specimen should be well handled and adapted to the particular specimen according to good laboratory practices.

LIMITATIONS

• Final identification must be done by biochemistry and serology, and can be performed directly from the plates on suspected colonies.

• This medium has a very high sensitivity but some *Salmonella Dublin* may appear colourless, nevertheless *Salmonella Dublin* is a rarely encountered serovar.

• Some *E.coli* strains may develop a very slight mauve colouration.

• Some *Pseudomonas* may have similar mauve colony aspect and can be eliminated by an Oxydase test.

QUALITY CONTROL

Please perform Quality Control according to the use of the medium and the local QC regulations and norms.

Good preparation of the medium can be tested, isolating the ATCC strains below:

REFERENCES

Please refer to our website page «Publications» for scientific publications about this particular product.

Web link: <http://www.chromagar.com/publication.php>

DISPOSAL OF WASTE

After use, all plates and any other contaminated materials must be sterilized or disposed of by propriate internal procedures and in accordance with local legislations. Plates can be destroyed by autoclaving at 121°C for at least 20 minutes.

IFU/LABEL INDEX



Quantity of powder sufficient for X liters of media



Expiry date



Required storage temperature



Store away from humidity

Σ Pack Size

5000 ml

=

250 Tests of 20ml

5000 ml

=

25 L

=

1250 Tests of 20ml

25 L

=

Ordering References

SA162

=

SA162(B)

+

SA162(S)

SU702

=

White Opaque Suppl.

SA163-25

=

SA163-25(B)

+

SA163-25(S)

SU703-25

=

White Opaque Suppl.

CHROMagar™ and Rambach™ are trademarks created by Dr. A. Rambach - ATCC® is a registered trademark of the American Type Culture Collection
NT-EXT-046 V4.1 / 18-Sep-17

CHROMagar
The Chromogenic Media Pioneer



CHROMagar 4 place du 18 juin 1940
75006 Paris - France

Email: CHROMagar@CHROMagar.com

Tel +33 (0)1.45.48.05.05. Website: www.CHROMagar.com

