

## Product: GPS - Growth Promotion Supplements

### Specification

Growth factors supplement for the isolation of pathogenic Neisseria.

Presentation				
5 Lyophilized/5 Solt.	Packaging Details	Shelf Life	Storage	
Vial	1 box with 10 vials with white plastic cap and tag	36 months	2-25 °C	
with: 3 ± 0.3 g	labelled (5 Freeze-dried vials + 5 vials with rehydration fluid).			

### Composition

Composition (vial):	
Vitamin B12	0.10 mg
L-Glutamine	100 mg
Adenine	10 mg
Guanine	0.3 mg
p-Amino benzoic acid	0.13 mg
L-Cystine	11 mg
ß-NAD	
CoCarboxilase	1 mg
Ferric Nitrate	0.2 mg
Thiamine Vit B1	0.03 mg
Cysteine	
Glucose	
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NOTE : Each vial is sufficient to supplement 250 ml of GC Base Agar for Neisseria.+ 250 ml Hemoglobine.

### **Description /Technique**

Nutritional supplement that enhances the growth of fastidious microorganisms such as Neisseria.

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Reconstitute the vial with the sterile diluent in aseptic conditions and add it to 250 ml of any melted GC Agar base cooled to 50°C, previously supplemented also with hemoglobin (250ml). Do not overheat once supplemented.

Pour the complete medium into Petri dishes and, once solidified on a flat surface, spread the plates either by streaking or by spiral method.

Incubate the plates in microaerophilic conditions at  $35 \pm 2^{\circ}$ C for 24-48h.

(Incubation times longer than those mentioned above or different incubation temperatures may be requied depending on the sample or the specifications).

After incubation, count all the colonies that have appeared onto the surface of the agar.

Presumptive isolation of Neisseria spp. must be confirmed by further microbiological and biochemical tests.



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Growth

## **Quality control**

**Physical/Chemical control** 

Color : Pink

### **Microbiological control**

Distribute the complete medium, cooled to 50 °C, into 90 mm plates

Inoculate 30-300 CFU (productivity) 1.000-10.000 CFU (selectivity)

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Microaerophila. Incubation at 37 ± 1 °C, reading after 24-48 hours

### Microorganism

Neisseria meningitidis ATCC® 13090	Good
Neisseria gonorrhoeae ATCC® 19424	Good

#### **Sterility control**

Study 5 vials - Reconstitute and dissolve each one in 100 ml of TSA + neutralizers - Pour into 90 mm plates. Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH. Check at 7 days after incubation in same conditions.

### Bibliography

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· MacFADDIN, J. (1985) Media for isolation-cultivation-Identification-maintenance of medical bacteria. Vol. I. William & Wilkins. Baltimore.

· ODEGAARD, K. (1971) Trimethoprim for the prevention of overgrowth by swarming Proteus in the cultivation of gonococci. Acta. Path. Microbiol. Scand. Sect. (B) 79:545-548.

• THAYER, J. D. & J. E. MARTIN (1966). Improved medium selective for cultivation of Neisseria gonorrheae and N. meningitidis Pub. Health Rep. 81:559-562.