

Staphylococcus Agar N° 110

Used for the isolation of *Staphylococcus*

Formula in grams per liter:

Sodium Chloride	75,00	Gelatin	30,00
Casein Peptone	10,00	D-Mannitol	10,00
Dipotassium Phosphate	5,00	Yeast Extract	2,5
Lactose	2,00	Bacteriological Agar	15,00

Final pH: 7,0 ± 0,2 at 25 °C

Preparation:

Suspend 149 grams of the medium in one liter of distilled water. Mix well. Heat with frequent agitation and boil for one minute. Dispense and sterilize in autoclave at 121°C (15 lbs. sp.) for 15 minutes.

Uses:

Staphylococcus Agar No. 110 is used to isolate staphylococci from purulent processes, cases of pneumonia, meningitis, furunculosis, urethritis, vaginitis, etc. This medium is also used for isolating staphylococci which contaminate a wide variety of foods and produce food poisoning.

It is possible to enrich the media by adding 5% blood, which also produces good hemolytic reactions and formation of golden yellow colonial pigments. Mannitol fermentation is detected by adding a few drops of Bromothymol blue and looking for a yellow halo around the colony. The plates can be flooded with 5 ml. of a saturated solution of ammonium sulfate, or better yet, with a drop of 20% sulfasalicylic acid and incubated for 12 minutes to observe the hydrolysis of the gelatin: clearing around the colony constitutes a positive hydrolysis (Stone Reaction).

Microbiological Tests:

Microorganisms	Growth	Pigment production
<i>Bacillus subtilis</i> ATCC 6633	Satisfactory	-
<i>Escherichia coli</i> ATCC 25922	Inhibited	-
<i>Staphylococcus aureus</i> ATCC 25923	Satisfactory	+
<i>Staphylococcus aureus</i> ATCC 6538	Satisfactory	+
<i>Staphylococcus epidermidis</i> ATCC 12228	Satisfactory	-

