**MUELLER-HINTON Agar**

Media proposed by MUELLER and HINTON (1941) for testing the sensitivity of clinically important pathogens towards antibiotics or sulfonamides.

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*in vitro diagnosticum -  For professional use only*

These culture media comply with the requirements of the WHO (1961, 1977) and DIN Norm 58930.

MUELLER-HINTON agar is used for agar diffusion tests while MUELLER-HINTON broth is employed for the determination of the MIC in serial dilution tests.

**Principle**
Microbiological method

**Mode of Action**
The composition of the culture media provide favourable growth conditions, the media are almost totally devoid of sulfonamide antagonists.

In order to improve the growth of fastidious microorganisms, blood can be added to MUELLER-HINTON agar. According to JENKINS et al. (1985), this may lead to false results when testing the susceptibility of enterococci to aminoglycosides.

**Typical Composition (g/litre)**
Meat infusion 2.0; casein hydrolysate 17.5; starch 1.5; agar-agar 13.0.

**Preparation and Storage**
Usable up to the expiry date when stored dry and tightly closed at +15 to +25° C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 to +25° C.

Suspend 34.0 g/litre, autoclave under mild conditions (10 min at 115 °C), if required cool to 45-50 °C and add 5-10 % defibrinated blood, pour plates.

pH: 7.4 ± 0.2 at 25 °C.

Without blood, the plates are clear to opalescent and yellowish-brown.

**Specimen**
e.g. Isolated bacteria from urine,
Clinical specimen collection, handling and processing, see general instructions of use.

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See also General Instruction of Use
Warnings and precautions see ChemDAT®
(www.chemdat.info)

**Experimental Procedure and Evaluation**
Carry out the sensitivity or resistance test as directed.
Incubation for 24 h at 35 °C aerobically.

**Literature**


**Ordering Information**

<table>
<thead>
<tr>
<th>Product</th>
<th>Merck Cat. No.</th>
<th>Pack size</th>
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</thead>
<tbody>
<tr>
<td>MUELLER-HINTON Agar</td>
<td>1.05437.0500</td>
<td>500 g</td>
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<tr>
<td>MUELLER-HINTON Agar</td>
<td>1.05437.5000</td>
<td>5 kg</td>
</tr>
<tr>
<td>Merckoplate® MUELLER-HINTON Agar</td>
<td>1.10414.0001</td>
<td>20 plates</td>
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</tbody>
</table>
MUELLER-HINTON Agar

Quality control

<table>
<thead>
<tr>
<th>Test discs</th>
<th>Esch. coli ATCC 25922</th>
<th>Staph. aureus ATCC 25923</th>
<th>Pseud. aeruginosa ATCC 27853</th>
<th>Enteroc. faecalis ATCC 33186</th>
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</thead>
<tbody>
<tr>
<td>Ampicillin 10 µg</td>
<td>16-22</td>
<td>27-35</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Tetracyclin 30 µg</td>
<td>18-25</td>
<td>19-28</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Gentamicin 10 µg</td>
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<td>19-27</td>
<td>16-21</td>
<td>-</td>
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<tr>
<td>Polymyxin B 300 IU</td>
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<td>7-13</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Sulfamethoxazole 1.25 µg</td>
<td>24-32</td>
<td>24-32</td>
<td>-</td>
<td>&gt; 20</td>
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<tr>
<td>+Trimethoprim 23.75 µg</td>
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