

95586 XLD Agar (Xylose Lysine Deoxycholate Agar)

XLD Agar is a moderately selective and differential solid medium for the isolation of gram-negative enteric pathogens (like species from *Shigella* and *Salmonella*) from clinical and specimens or food products. Addition of xylose differentiate enteric pathogens from *Shigella*, the only enteric pathogens non-xylose fermenting. Deoxycholate inhibits gram-positive. Complex sodium thiosulfate-ferric ammonium citrate produces black-centered colonies when ferric ammonium citrate precipitates (H₂S production).

Composition:

| Ingredients | Grams/Litre |
|-------------------------|-------------|
| Yeast Extract | 3.0 |
| Lactose | 7.5 |
| Sucrose | 7.5 |
| Xylose | 3.5 |
| L-Lysine hydrochloride | 5.0 |
| Sodium Chloride | 5.0 |
| Ferric Ammonium Citrate | 0.8 |
| Sodium Thiosulfate | 6.8 |
| Sodium Deoxycholate | 2.5 |
| Phenol Red | 0.08 |
| Agar | 15.0 |
| Final pH (at 25 °C) | 7.4 ± 0.2 |

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions:

Suspend 56.7 g of dehydrated media in 1000 ml of purified filtered water. Heat with frequent agitation and boil for one minute. DO NOT STERILIZE. Cool to 45-50° C. Mix gently and dispense into sterile Petri dishes. The prepared agar plates should be brought to room temperature. Inoculate plate with specimen and streak for isolation. Incubate at 35°C for 24-48 hours.

This medium is only a part of the identification. Other tests may be required.

Results after 24 hours at 35°C

| Organisms (ATCC) | Growth | Colour of Colony |
|---------------------------------------|--------------|-------------------------|
| <i>Salmonella typhimurium</i> (14028) | + | red with black centres |
| <i>Shigella flexneri</i> (12022) | + | red |
| <i>Klebsiella pneumoniae</i> (13883) | + | yellow, opaque colonies |
| <i>Escherichia coli</i> (25922) | - or partial | |
| <i>Streptococcus faecalis</i> (29212) | - or partial | |



References:

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Precautions and Disclaimer

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