

AXLA001

Xylose Lysine Deoxycholate Agar

For the selection of Salmonella in accordance with the harmonized method of USP/EP/BP/JP/IP.

Composition	Ingredients Gms / Litre
Xylose	3.500
L-lysine	5.000
Lactose monohydrate	7.500
Sucrose	7.500
Sodium chloride	5.000
Yeast extract	3.000
Sodium Deoxycholate	2.500
Sodium Thiosulphate	6.800
Ferric ammonium citrate	0.800
Phenol red	0.080
Agar-Agar	13.500

Appearance:

Pink to Red Colour Sterile Xylose Lysine Deoxycholate Agar in 90 mm Petri Plates

pH (at 25°C):

7.20 to 7.60

Principle:

XLD AGAR or (XYLOSE LYSINE DEOXYCHOLATE AGAR) was formulated by Taylor, it is a differential media used for isolation and differentiation of enteric pathogens particularly Shigella and Salmonella. The medium contains Yeast extracts as source of vitamins and minerals. Addition of Sodium deoxycholate acts as a selective agent which is inhibitory to Gram-positive bacteria. It suppresses the growth of other enteric pathogens and enhances the growth of only few enteric bacilli. The medium contains Xylose as a fermentable carbohydrate which is utilized by Salmonella species. The medium pH is changed due to fermentation of Xylose which is detected by indicator Phenol red, thus the colony colour turns red. The medium also contains Lactose and Sucrose as the source of fermentable sugar. L-lysine is an essential amino acid source. Lysine is added to differentiate Salmonella sp. Sodium chloride helps maintaining the osmotic balance of the cells. This medium also allows differentiation of bacilli based on their ability to produce H₂S, it contains Sodium thiosulphate and Ferric ammonium citrate that helps visualizing the black centered colonies on production of hydrogen sulphide in the medium. Agar is added as the solidifying agent.

Quantity of Medium

30ml of medium in 90mm plates

Dose of Gamma irradiation

12to 17 KGy

Cultural Response

Cultural characteristics observed by using standard ATCC cultures after an incubation 24 hours at 30-35°C and recovery should be greater than 70%.



Technical Data Sheet

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Sterility Test:

Passes release criteria.

Shelf Life and Storage Conditions:

Use before expiry date on the label and store below 25°C.

Reference Pharmacopoeia:

USP/EP / BP / JP / IP