

XLD Agar

Product: XLD Agar

Catalogue Number: i23196

Content: 500 g

Use: XLD Agar is the complete Xylose Lysine Desoxycholate Agar, a moderately selective medium recommended for isolation and differentiation of enteric pathogens, especially *Shigella* species.

Principle: Xylose is incorporated into the medium because it is fermented by practically all enterics except for the shigellae. This property enables the differentiation of *Shigella* species. Lysine is included to enable the *Salmonella* group to be differentiated from the nonpathogens. Without lysine, salmonellae rapidly would ferment the xylose and be indistinguishable from nonpathogenic species. After the salmonellae exhaust the supply of xylose, the lysine is attacked via the enzyme lysine decarboxylase, with reversion to an alkaline pH, which mimics the *Shigella* reaction. To prevent similar reversion by lysine-positive coliforms, lactose and sucrose (saccharose) are added to produce acid in excess. Degradation of xylose, lactose and sucrose generates acid products, which in the presence of the pH indicator phenol red, causes a color change in the medium from red to yellow.

Composition g / l:

Xylose	3.500
L-Lysine	5.000
Lactose monohydrate	7.500
Sucrose	7.500
Sodium chloride	5.000
Yeast extract	3.000
Phenol red	0.080
Sodium deoxycholate	2.500
Sodium thiosulphate	6.800
Ferric ammonium citrate	0.800
Agar	13.500

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Dehydrated Appearance: Pink, fine, homogeneous.

Solution: 5.5% solution, soluble in purified water upon boiling. Solution is red, very slightly to slightly opalescent.

Prepared Appearance: Red, slightly opalescent.

pH at 25 °C: 7.4 ± 0.2

Storage: Store at 15-30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label

Shelf life: If stored under recommended conditions the unopened container has a shelf-life of 3 years after day of production (see expiry date on the label).