LISTERIA ISOLATION SWAB

The Listeria Isolation Swab is designed for use alongside traditional selective methods to improve the quality system and minimize the risk of Listeria contamination. This simple to use diagnostic test can be applied anywhere in the environment and on foodstuffs where the presence of *Listeria spp.* would be critical. *Listeria spp.* and specifically *Listeria monocytogenes* are rapidly becoming the most important pathogen in the Food Industry; regulatory bodies from around the world are insisting that all food products are Listeria free.

Listeria Isolation Swab works on an enhanced Esculin media formulation. The hydrolysis of Esculin gives a distinctive black/brown precipitate. Inhibitors are present in the media that will inhibit the growth of non-Listeria spp. Only *Listeria spp.* will grow within the media to produce a black/brown precipitate due to Esculin hydrolysis (See table).

Instructions for Use

1. Peel back wrapper to expose both caps.
2. Remove swab and sample test site by rubbing swab over as large an area as practicable.
3. Remove cap of culture tube with thumb and forefinger and discard.
4. Insert swab in culture tube and push down fully to immerse the swab completely.
5. Fill in time, date and site details.
6. Incubate at 37° C for up to 48 hours.
7. Read results.
   A positive result is indicated by a color change from Light Brown Agar to Black/Dark Brown commencing around the bud, any color change is significant. A negative result shows no color change.
8. Record results and dispose of tube. The lid of the tube must NOT be removed after incubation of the sample.

Shelf Life/Expiry Date
Expiry date is 12 months from the month of manufacture and is printed onto the tube label, peel pouch and boxes.

Storage
Listeria Isolation Swabs should be stored in a dry place between +5° C to +25° C. **Do NOT freeze.**

Sterilization Method
Listeria Isolation Swabs have been sterilized by irradiation.

100 square cm
-Actual Size-

Precautions When Swabbing!

1. When sampling an area always use the same swabbing technique.
2. Always try to sample the same surface area (100 cm^2 or 200 cm^2), and to be consistent in your sampling.
3. The moisture level on the surface should not vary at different sample times. It may be preferable with dry surfaces to wet the swab in a suitable wetting agent such as Ringers, Tween Lecithin Thiosulphate Ringers or Tween Peptone water.

Battery of Organisms tested against Listeria Isolation Swab

Organism	C.F.U. in Sample	Colour Change
Listeria monocytogenes NCTC 11994	7	Black
Listeria monocytogenes NCTC 5214	19	Black
Listeria monocytogenes NCTC 7973	15	Black
Listeria ivanovii	10	Black
Listeria innocua NCTC 11288	9	Black
Listeria seeligeri	1×10^4	Black
Listeria welshimeri NCTC 11857	1×10^3	Black
Listeria murrayi	1×10^5	Black
Listeria grayi	1×10^5	Black
Staphylococcus aureus NCTC 6571	4×10^8	No Change
Strep faecalis NCTC 775	1.5×10^5	No Change
Aeromonas hydrophilla NCTC 1767	1.5×10^7	No Change
Bacillus subtilis NCTC 10400	4×10^7	No Change
Bacilus pumilis NCTC 10327	1×10^7	No change
Bacilus cereus NCTC 10320	2×10^6	No change
Escherichia coli NCTC 9001	1×10^7	No change
Escherichia coli NCTC 10418	6×10^7	No change
Klebsiella pneumoniae	3×10^7	No change
Klebsiella aerogenes NCTC 7418	1×10^8	No change
Klebsiella aerogenes NCTC 11228	3×10^7	No change
Proteus vulgaris NCTC 1683	1×10^8	No change
Proteus mirabilis NCTC 841	5×10^8	No change
Citrobacter freundii	1.2×10^8	No change
Citrobacter diversus	3×10^6	No change
Enterobacter agglomerans	1.1×10^8	No Change
Morganella morgani	1.4×10^8	No Change
Serratia liquefaciens	1×10^8	No Change
Serratia marcescens	1×10^7	No Change
Yersinia enterolytica	1×10^7	No Change
Enterobacter cloacae	3×10^7	No Change
Salmonella typhimurium NCTC 74	3×10^8	No Change
Shigella flexneri	8×10^6	No Change
Psuedomonas aeruginosa	9×10^7	No Change
Pseudomonas putida NCTC 10936	1.5×10^7	No Change
Pseudomonas fluorescens NCTC 10038	1×10^7	No Change
Pseudomonas maltophillia NCTC 102157	6×10^7	No Change
Pseudomonas vesicularis NCTC 10900	4×10^6	No Change
Pseudomonas cepacia NCTC 10743	3.5×10^7	No Change
Pseudomonas putrefaciens NCTC 10735	3×10^6	No Change
Candida albicans	2×10^6	

Identical procedure can be applied, for complementary detection of Coliform (Ident No. 1000101) & Salmonella (Ident No. 1000102) from the Hyserve portfolio.

Alternative Products of type Compact Dry (Plates):

Product ID	Description / size of the kit
1502885	Compact Dry LS (Listeria), 40, 240, 500, 1400 plates/box