

LISTERIA ISOLATION SWAB

The Listeria Isolation Swab is designed for use alongside traditional selective methods to improve the quality system and minimise 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.**

Sterilisation 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 cm² or 200 cm²), 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

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

Applying the identical procedure, for complementary detection of Coliform only the use of HyServe product, No. 1000101 (Coliform Swab, 25 pcs/box) is recommended.

Alternative Products of type Compact Dry (Plates):

Product ID	Description / size of the kit
1000899	Compact Dry LS (Listeria), 40 plates/box
1001013	Compact Dry LS (Listeria), 240 plates/box
1002881	Compact Dry LS (Listeria), 920 plates/box