

Letters to the Editor

L. monocytogenes Oligonucleotide Probe

The article entitled "Rapid Confirmation of *Listeria monocytogenes* Isolated from Foods by a Colony Blot Assay Using a Digoxigenin-Labeled Synthetic Oligonucleotide Probe" (3) was most interesting. However, certain statements made in the paper need further clarification.

The difference between Msp110 and our probe AD07 (20-mer) is the total number of nucleotides. There is no mismatch between these two probes. The only difference is that Msp110 has an extra T at the 5' end of the molecule because, unlike AD07, it is 21-mer and not 20-mer. The following sequence comparison clarifies this point.

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Msp110 5' T TGA CAG CGT GTG TAG TAG CA 3'  
AD07 5' TGA CAG CGT GTG TAG TAG CA 3'
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The statement by Kim et al. (3) that our probe (AD07) hybridized to *L. seeligeri*, whereas Msp110 did not, is misleading. Our probes (AD07 and AD03) are, in fact, specific for *L. monocytogenes*. Except for one strain, none of the *L. seeligeri* strains (19 tested) hybridized with them (2). Our probe results initially indicated that the identification of this particular *L. seeligeri* strain might be incorrect. We examined the strain further and found it to be rhamnose positive and xylose negative. It also hybridized with the listeriolysin O probes specific for *L. monocytogenes* (1). Thus, it appeared that the particular strain was mislabeled as *L. seeligeri* and should be *L. monocytogenes*, as we suggested (2).

REFERENCES

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2. Datta, A. R., B. A. Wentz, D. Shook, and M. W. Trucksess. 1988. Synthetic oligonucleotide probes for detection of *Listeria monocytogenes*. *Appl. Environ. Microbiol.* **54**:2933-2937.
3. Kim, C., B. Swaminathan, P. K. Cassidy, L. W. Mayer, and B. P. Holloway. 1991. Rapid confirmation of *Listeria monocytogenes* isolated from foods by a colony blot assay using a digoxigenin-labeled synthetic oligonucleotide probe. *Appl. Environ. Microbiol.* **57**:1609-1614.

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Author's Reply

We clearly stated in our article that our probe (Msp110) and Dr. Datta's probe (AD07) differ by one oligonucleotide and that our probe is a 21-mer whereas his probe is a 20-mer. We did not state that there were internal mismatches between the two probes.

We would like to clarify the confusion regarding the isolate of *L. seeligeri* and its reactivity with our probe and Dr. Datta's probe. The isolate (labeled 18A-116 by Dr. Datta [1]) originated in Dr. Wei-Hua Lee's laboratory at the U.S. Department of Agriculture and was sent to Dr. Jocelyn Rocourt at the Institut Pasteur. Dr. Rocourt identified it as *L. seeligeri*. Dr. Datta reported that 18A-116 hybridized to his *L. monocytogenes*-specific oligonucleotide probe and suggested that it was misidentified as *L. seeligeri* by the Bacterial Reference Laboratory at the Centers for Disease Control (CDC) and at the Pasteur Institute. The isolate (18A-116) had not been characterized at the CDC at that time. Dr. Rocourt informed us that 18A-116 was *L. seeligeri*. Subsequently, we received 18A-116 from Dr. Lee and we (R.E.W.) confirmed that it was *L. seeligeri*. Interestingly, we requested and received 18A-116 from Dr. Datta and identified it as *L. monocytogenes* serotype 4b. Therefore, it appears that the 18A-116 that was in Dr. Datta's laboratory was not the same as the 18A-116 that was sent to the Institut Pasteur and CDC by Dr. Lee.

Dr. Datta is right in pointing out that the statement by Kim et al. (2) is misleading in that it implies that Dr. Datta's probe reacts with all *L. seeligeri*. We (2) based our comment on the assumption that 18A-116 was *L. seeligeri*. We hope that this will eliminate the confusion regarding 18A-116. We apologize for the misleading statement about the specificity of Dr. Datta's probe.

REFERENCES

1. Datta, A. R., B. A. Wentz, D. Shook, and M. W. Trucksess. 1988. Synthetic oligonucleotide probes for detection of *Listeria monocytogenes*. *Appl. Environ. Microbiol.* **54**:2933-2937.
2. Kim, C., B. Swaminathan, P. K. Cassidy, L. W. Mayer, and B. P. Holloway. 1991. Rapid confirmation of *Listeria monocytogenes* isolated from foods by a colony blot assay using a digoxigenin-labeled synthetic oligonucleotide probe. *Appl. Environ. Microbiol.* **57**:1609-1614.

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