

**Middlebrook 7H11/ 7H11 Select Comparison
Research Summary Report
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Purpose: Compare Hardy Diagnostics Middlebrook 7H11/ Middlebrook 7H11 Selective Biplate to the equivalent Becton Dickinson product.

Test Methods: *M. kansasii* (ATCC 12478), *M. tuberculosis* (ATCC 25177), *M. scrofulaceum* (ATCC 19981), *M. fortuitum* (ATCC 6841), and *M. intracellulare* (13950) were maintained in 7H9 broth at 35°C in a CO₂ incubator. A 40⁻³ dilution of each actively growing strain was prepared in fresh 7H9 broth. Three drops of the suspension was used to inoculate each side of the biplate. Hardy Diagnostics Middlebrook 7H11/Middlebrook 7H11 Selective (J75) was inoculated at the same time as the BD equivalent (297250). Plates were incubated at 35°C in a CO₂ incubator and viewed after one week, two weeks, and three weeks.

Results: Growth of *M. kansasii* (ATCC 12478), *M. tuberculosis* (ATCC 25177), *M. scrofulaceum* (ATCC 19981), and *M. fortuitum* (ATCC 6841) was visible after 1 week of incubation. *M. intracellulare* (13950) did not show any growth on either media. Photos taken after 1 week of incubation are shown below in Images 1-4. Average colony size was larger on J75, especially on the Middlebrook 7H11 Selective side. The BD Middlebrook non-selective side had several smaller colonies after 1 week of incubation. The majority of colonies on the BD selective side were smaller than the colonies on the selective side of the HDx plate. There was no noticeable difference in colony size after two weeks of incubation. On both the HDx and BD plates, colonies on the selective side were smaller than the colonies on the non-selective side after one week. There was no noticeable difference in colony size between the different sides after two weeks.



Image 1: *M. kansasii* (ATCC 12478) grown for one week at 35°C in a CO₂. HDx plate is on the left and BD plate is on the right. The selective side (side II) is on the right side of each plate.



Image 2: *M. fortuitum* (ATCC 6841) grown for one week at 35°C in a CO₂. HDx plate is on the left and BD plate is on the right. The selective side (side II) is on the right side of each plate.

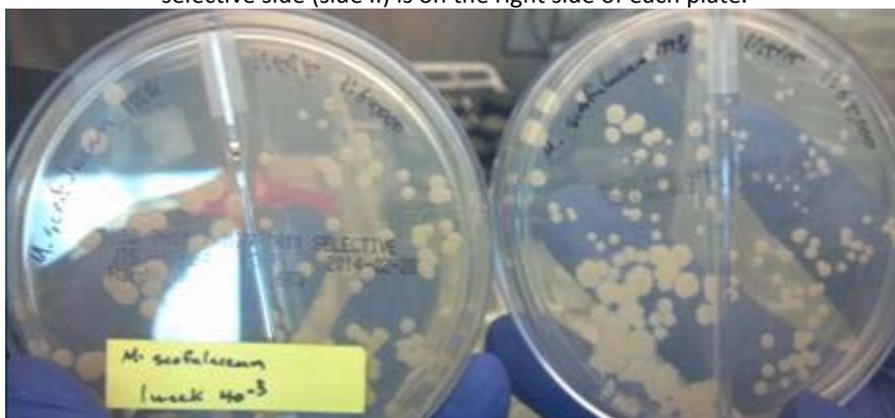


Image 3: *M. scrofulaceum* (ATCC 19981) grown for one week at 35°C in a CO₂. HDx plate is on the left and BD plate is on the right. The selective side (side II) is on the right side of each plate.



Image 4: *M. tuberculosis* (ATCC 25177) grown for one week at 35°C in a CO₂. HDx plate is on the left and BD plate is on the right. The selective side (side II) is on the right side of each plate.



Conclusion: After one week of incubation, both the HDx and BD plate showed smaller colonies on the selective side. The average colony size on the selective side of the HDx plate was larger than the average colony size on the selective side of the BD plate. The non-selective side on the BD plate typically had several colonies that were smaller than the colonies of the equivalent HDx side. There was no noticeable difference in colony size between the plates or between the sides after two weeks of incubation.