Our Indoxyl Acetate Disks can aid in the rapid identification and differentiation of Campylobacter and Helicobacter species based on their ability to hydrolyze the chemical substrate indoxyl acetate. This test is useful for differentiating:

1. *Campylobacter coli* (+), *C. cryaerophila* (+), *C. fennelliae* (+), *C. jejuni* (+), *C. upsaliensis* (+) from *C. fetus* subsp. *fetus* (–), *C. fetus* subsp. *venerealis* (–), *C. hyointestinalis* (–), *C lari* (–) and other *Campylobacter* species (–)
2. *Helicobacter mustelae* (+) from *H. pylori* (–)

The increasing importance and emergence of Campylobacter species as a causative agent for human and animal infections has made their detection critical. This has resulted in the development of a number of physiological and biochemical tests to aid in their identification, such as hippurate hydrolysis tests, and susceptibility tests to cephalothin and nalidixic acid. The emergence of atypical, hippurate negative, strains and nalidixic acid resistant strains has made the detection and identification of Campylobacter species more difficult. The use of indoxyl acetate was developed and reported by Mills and Gherna in 1987. They examined a variety of substrates and found that certain Campylobacter species possessed an esterase capable of hydrolyzing the compound indoxyl acetate. The results from this rapid biochemical test has proven to be a stable, phenotypic feature for Campylobacter species making it very useful in their identification and differentiation. This test has also been shown to be useful in the differentiation of Helicobacter and Wolinella species.

**Recommended Procedure**

1. Place disk in an empty, sterile petri-dish. Allow disk to adjust to room temperature for 2 to 3 minutes prior to proceeding.
2. Moisten disk with a drop of sterile water.
3. Using a sterile inoculating loop, heavily inoculate the moistened disk with several colonies of the test organism derived from a pure, fresh culture.
4. Incubate for 30 minutes at room temperature.
5. Examine disk after the incubation period and interpret and record the results.

**Interpretation of Results**

Positive: Blue color change

Negative: No color change

**Quality Control**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Expected Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Campylobacter jejuni</em></td>
<td>+ve Blue color change</td>
</tr>
<tr>
<td>ATCC 33291</td>
<td></td>
</tr>
<tr>
<td><em>Campylobacter fetus</em></td>
<td>-ve No color change</td>
</tr>
<tr>
<td>ATCC 27374</td>
<td></td>
</tr>
</tbody>
</table>

**Storage and Shelf Life**

Our Indoxyl Acetate Disks should be stored at -20°C. At this temperature they have a shelf life of 32 weeks from the date of manufacture.
**Ordering Information**

<table>
<thead>
<tr>
<th>Cat#</th>
<th>Description</th>
<th>Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI40-25</td>
<td>Indoxyl Acetate Disks</td>
<td>25/vial</td>
</tr>
</tbody>
</table>

**References**


Original: August 2005
Revised / Revisited: October 2014