**INTENDED USE**

Wellcolex Colour Shigella provides a simple, rapid procedure for detection and identification of Shigella species present on solid culture media. The Wellcolex Colour Shigella test has been developed for detection and identification of Shigella species.

**SUMMARY AND EXPLANATION OF THE TEST**

1. The genus Shigella comprises of a number of somatic antigens that are shared with organisms from other species, particularly Enterobacteriaceae, Pseudomonas shigelloides and other species. These represent common antigens, not cross-reactants, and can be differentiated by means of the biochemical tests. Each strain, but not all, ferment lactose.

2. Some strains of Shigella carry envelope antigens reported to inhibit the agglutination of the reagents, but with a mixed reaction. If the agglutination is not interpretable, this result should be recorded as a negative pattern. In this event further isolation and identification of the organism should be performed.

3. A number of the well-characterised isolates of Shigella have been found to be non-reactive with the test reagents, due to possible reactivity with the antigen. If a well-characterised isolate still fails to react with the reagents, a competitive agglutination inhibition test should be performed.

**REAGENTS**

**COMPONENTS PROVIDED**

- **Latex Reagent:** Shigella species and the smooth purple reaction will be obtained with the use of the reagents.

- **Positive Controls:** Shigella species. Valid tests should be performed on non-lactose fermenting colonies growing in primary selection on media for Campylobacter jejuni, Enterobacter spp., Salmonella spp. and other bacteria, such as Enterococcus faecalis, in order to confirm enrichment from broth media or in pure culture for the organisms are present. If negative, it is important to confirm the results of the test, the bacterial culture should then be tested for the presence of somatic antigens. Further identification should be performed for the same suspension may be used for testing with Wellcolex Colour Salmonella (ZC50/103).

- **Procedure:** The colour of the agglutinated latex in Reagent 1 and Reagent 2 should be scored as above to the colour of the positive control (Blue or Red).

- **Identification of Shigella from Plate Cultures**

**1. IDENTIFICATION OF SHIGELLA**

1. The genus Shigella is closely related to other members of the Enterobacteriaceae tribe and the somatic antigens of the somatic antigens are shared with organisms from other species, particularly Enterobacteriaceae, Pseudomonas shigelloides and other species. These represent common antigens, not cross-reactants, and can be differentiated by means of the biochemical tests. Each strain, but not all, ferment lactose.

2. Some strains of Shigella carry envelope antigens reported to inhibit the agglutination of the reagents, but with a mixed reaction. If the agglutination is not interpretable, this result should be recorded as a negative pattern. In this event further isolation and identification of the organism should be performed.

3. A number of the well-characterised isolates of Shigella have been found to be non-reactive with the test reagents, due to possible reactivity with the antigen. If a well-characterised isolate still fails to react with the reagents, a competitive agglutination inhibition test should be performed.

**REFERENCES**

1. The results shown in Table 1 were used throughout. The results in Table 2 are measures that have been taken to ensure that the reagents do not cause cross-reactions with other species, particularly Enterobacteriaceae, Pseudomonas shigelloides and other species. These represent common antigens, not cross-reactants, and can be differentiated by means of the biochemical tests. Each strain, but not all, ferment lactose.

2. Some strains of Shigella carry envelope antigens reported to inhibit the agglutination of the reagents, but with a mixed reaction. If the agglutination is not interpretable, this result should be recorded as a negative pattern. In this event further isolation and identification of the organism should be performed.

3. A number of the well-characterised isolates of Shigella have been found to be non-reactive with the test reagents, due to possible reactivity with the antigen. If a well-characterised isolate still fails to react with the reagents, a competitive agglutination inhibition test should be performed.