Pyrazinamidase Test Kit for Mycobacteria  

This is an important test kit to distinguish *M. marinum* (positive) from *M. kansasii* (negative) strains. Also weakly niacin positive strains of *M. bovis* (negative) can be distinguished from *M. tuberculosis* and other members of the *M. avium* complex (both positive).

**Principle:**

Pyrazinamidase acts on the substrate pyrazinamide incorporated in the media to free pyrazinoic acid. On addition of the PYZ reagent a red coloured band develops after four hours at refrigeration temperature.

**Kit contents:**

1. SL121; Hipyrazide glass tube w/ PYZ agar 10 nos
2. R059, PYZ reagent 1 no.

**Directions:**

Important: Use a three week old Mycobacterial culture (to be tested) and prepare a heavy inoculum (Inoculum should be visible).

**Reagent preparation:**

Rehydrate the PYZ reagent, R059 with 10 ml sterile distilled water.

**Test Procedure:**

1. Heavily inoculate the agar medium SL121 with a 2-3 week old culture (1ml) of the unknown mycobacterium to be tested. Label this as test.
2. Add 1 ml sterile distilled water to another slant SL121. Label this as negative control.
3. Incubate the test and negative control at 35°C for 4 days.
4. Rehydrate the PYZ reagent R059 with 10 ml sterile distilled water. Add 1 ml each to test and negative control respectively.
5. Keep in refrigerator (2 to 8°C) for four hours.
6. After four hours, examine the test and negative control for a pink/red coloured band in the reagent layer on the surface of the agar, using incident room light against a white background.
   
**Note:** Unused rehydrated PYZ reagent may be refrigerated for future use.

**Interpretation:**

**Positive:** Formation of pink/red coloured band in the reagent layer on the surface of the agar.

**Negative:** No colour change.
Pyrazinamidase Test Kit for Mycobacteria K045

Disposal:
After the test, all the material should be disposed /discarded by autoclaving or incineration.

Storage and shelf-life:
Store at 2 to 8°C. Use before expiry date on the label.

References: