

# Importance of Rapid Urease Test (RUT) Kit:

The Rut is an indirect test of the presence of H.Pylori based on the presence of urease in or the gastric mucosa. it has an advantage over serology that it only detects the presence of an active infection.

The sensitivity of various RUT test as primary diagnostic test is high and has been reported to very between approximately 80% and 100% and specificity between 97% and 99%.

### **Biopsy Size:**

The sensitivity and specificity depends majorly on the size of forceps used for taking biopsy.

### **Preparation of RUT Test:**

Each RUT strip must be inspected for colour change; if the agar-based media does not show yellow colour the RUT strip must be discarded.

Kindly mention patient details on RUT strip before conducting a biopsy or before placing the biopsy sapmle on the test agar based media.

#### **Procedure for RUT:**

- A biopsy specimen for RUT may be taken by the endoscopist after the thorough examination of the stomach
- The recommended area for biopsy is the sump of the antrum, along the greater curvature of the stomach.
- The recommended size of biopsy is 2-3mm in diameter.
- Peel back the label of the RUT strip and place the biopsy on the agar based media.
- Add 1-2 drops of setrile water provided with the kit.
- Then cover the test site with the label again, as it was at the beginning of the test.
- Dab gently on the test site.
- Observe for colour change of the agar based media from yellow to pink or red.
- The tests will show positive results in 10-180 minutes time frame. For better results the test strips could be kept at moderately warmer temperature not exceeding 38°C.

### **False Positive & False Negatives:**

• Positive results after 24 hours are most often false positive and should not be used for treatment decision; tests may turn positive from the presence non-H. Pylori urease containing organisms.

## **Storage:**

Store the kits at room temperature & do not freeze.