Lugol's Staining Solution (5%, Sterile)

L1508168

Storage: Room Temperature. Store in the dark.
Shipping: Normal.

Introduction:

Lugol's Iodine Solution, also known as Lugol's Iodine, Lugol's Solution or Lugol's Reagent, is an aqueous solution of iodine and potassium iodide. Invented by Lugol in 1829, it was named after its creator. In the past, Lugol's Iodine Solution was often used as a disinfectant and bactericide for emergency disinfection of drinking water, and also for detecting starch and various other substances in laboratories.

Aladdin Lugol's Iodine Solution adopts a classic formula and has the following applications: Detecting starch in samples such as leaves and food; Cell staining: it stains cell nuclei to facilitate observation; Schiller Test: used in colposcopy to screen for cancerous lesions of the vagina and cervix. Normal vaginal tissues are stained brown due to their high glycogen content, while cancerous cells remain unstained and appear pale in contrast to the surrounding tissues; Oxidizing bactericide, etc. The 5% Lugol's Iodine Solution is suitable for use as a mordant combined with crystal violet, safranine and other dyes for Gram staining of bacteria. With an iodine content of 5% and subjected to sterile processing, it is particularly suitable for application as a mordant for smearing and staining the cervix to assess the possibility of cervical cancer. This reagent is for research use only and not suitable for clinical diagnosis or any other purposes.

Operating Procedures (For Reference Only):

1. Operate in accordance with the specific requirements of the experiment or refer to the following steps.
2. Gently swab the cervix with a normal saline-moistened cotton ball or a dry cotton swab. Do not apply excessive force to avoid damaging the cervical epithelium.
3. Smear the cervix with a cotton ball soaked in 5% sterile Lugol's Iodine Stain. The cotton ball should be large enough to fully cover the cervix. Gently press the cervix (including the external cervical os) with the cotton ball in upward, downward, leftward and rightward directions to allow the Lugol's Iodine Solution to fully penetrate the cervical epithelium. After one minute, illuminate the area with a regular light source and directly observe the reaction of the cervical epithelium to the Lugol's Iodine Solution.
4. Make a preliminary diagnosis based on the degree of non-staining, surface morphology, boundary conditions, size, distance from the squamocolumnar junction, etc. Normal cervical epithelium turns reddish brown or black after iodine application; non-stained areas or partially iodine-stained areas are regarded as suspicious lesion areas. Regions with

CIN (cervical intraepithelial neoplasia) lesions or invasive carcinoma present as thick mustard-yellow or orange-yellow leukoplakia. The application of iodine solution during colposcopy helps identify lesion areas missed by the acetic acid method and can more clearly delineate the scope of abnormalities. The test results are classified as VILI (visual inspection with Lugol's iodine) negative, VILI positive, or suspected cancer, and the results should be recorded in the clinical examination form.

Precautions:

1. The 5% sterile Lugol's Iodine Stain has undergone sterile processing; please take precautions to avoid contamination.
2. This reagent is for research use only and shall not be used for clinical diagnosis.
3. For your safety and health, wear a lab coat and disposable gloves during operation.