

SPECIFICATIONS-FLUORESCENT IN-SITU HYBRIDIZATION WORK STATION

Background

The Minneapolis VA Health Care System Pathology and Laboratory Medicine Service line has a requirement to acquire a work station which includes a fluorescent microscope and automated imaging and analysis software suitable for fluorescence in-situ hybridization (FISH) analysis for all probes. The work station is used to observe, analyze, and archive (via digital photography) microscopic structures in human tissue samples using fluorescence. The system shall include all necessary software and hardware for viewing cell and signal detection in samples, image analysis, and image capture for review, interpretation, and reporting. The supplier shall provide on-site training for 3 staff and both telephone and if required on-site technical support of the equipment for the first year..

Requirements

The Supplier shall provide a new fluorescent microscope work station. The Supplier shall insure that the microscope is equipped with the following equipment and meet the following requirements prior to acceptance:

Fluorescence In-situ Hybridization Work Station

1. A brand new unit is required; no used equipment or accessories, listed below, are acceptable.
2. Has the capability to meet the demands of fluorescent in-situ hybridization analysis.
3. User control of selecting area of interest in tissue.
4. User control of scanned results.
5. User control of report generation.
6. Software that provides a standardized mode of analysis and result reporting.
7. Automate FISH analysis for all probes hybridized from paraffin sections.
8. Software tissue matching (scan and match a specific area from one slide to another).
9. Automated FISH analysis of all probes from bone marrow and peripheral blood samples.
10. Automated FISH analysis for urine specimens.
11. Software application with FDA clearance for ALK.
12. Fluorescent microscope.
 - a. Binocular phototube 30/25, 100:0/30:70/0:100
 - b. Condensor
 - c. Motorized multi-position turret
 - d. Illumination system.
 - e. Capable of bright field and fluorescent viewing
 - f. Objectives.
 - i. EC Plan-Neofluar 5x/0.16NA
 - ii. EC Plan-Neofluar 10x/0.3NA
 - EC Plan-Neofluar 63x/1.25NA Oil
 - g. Filter cube set.
 - i. F/C DAPI AxiolImager
 - ii. F/C FITC AxiolImager
 - iii. F/C Texas Red AxiolImager
 - iv. F/C Aqua Red AxiolImager
 - v. F/F Gold AxiolImager
 - vi. F/C FITC/Texas Red AxiolImager
 - h. Digital Camera.
13. Review and analysis platform.
14. Software that integrates simultaneous operations of all components and performs cell and signal detection with a user friendly interface as well as an expanding platform for future applications.

15. Open system that allows the user to add future applications without cost.
16. Viewing monitor.
17. Computer tower with hard drive for data storage.

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