Chemidoc Imaging System

1. System Should be capable of Applications: Fluorescence (EtBr, SYBR Green, SYPRO Ruby, SYBER safe, Flamingo fluorescent gel stains), Colorimetry (Coomassie Blue, Silver stain, blots, prestained markers), Colony plates (GFP, colorimetric), Chemiluminescence, Densitometry, Stainfree Imaging with Total protein normalization.
2. System should have Image resolution of 4 mega pixels or more.
3. Detector - Should have true 16bit CCD (not A/D) camera, Pixel density 65535 grey levels.
4. Dynamic range 4 order of magnitude or more
5. Camera should have peltier based cooling of minimum -30°C absolute or -50°C from room temperature.
6. Motorized zoom lens with C-mount, f/1.2, 12-75 mm.
7. Light sources should include – Trans-UV, epi-white as standard and should have option for trans-white, Trans blue (for SYBR safe DNA application).
8. Should have preparative UV mode for DNA band excision.
9. Should have Sample size- 28 X 36 cm or more and image area 26 X 35cm
10. Should have Autofocus feature with pre-calibrated focus for any zoom setting or sample height.
11. Should have Peak quantum efficiency more than 75 %
12. System should have 100% automatic Iris adjustment for all compatible applications.
13. The system should have Dynamic image flat fielding which precalibarted and optimized for every reaction.
14. Should have 100 % repeatability via recallable protocols.
15. Live image acquisition records real time development of the chemiluminescent reaction
16. One pack of 10% fast running stain free gel solution sufficient to cast as many as 50 gels of 1.00 mm thickness should be provided.
17. Imaging system should have Automatic capabilities with Application driven, user selected or recalled by a protocol.
18. System must have manual in/out sliding door design for easily accessible of transilluminator during gel excision experiments
19. Warranty – 3 years
20. System should come with Compatible Computer.
21. System should be supply with White Light tray for protein gels.

System Software-

1. Automatic generation of customizable reports
2. Snapshot tool to copy images, lane profiles, and graphs
3. Complete flexibility with automatic and manual detection of lanes and bands, using several algorithms
4. Should have tri-plex image capture capability and analysis features.
5. Publishing resolution (dpi) and publishing dimension can be specified with a one-click image export for publication. Provides functionality to produce image at user-defined dpi and dimension
6. No requirement for license registration and lifetime free upgradation.
7. Mac and PC compatible software
8. 16-bit and 8-bit tiff images with a one-click export option
9. The Software should automatically select the appropriate filters, light sources, and camera settings for all applications. Ensures that image optimization is specific to a selected gel or blot application or can be

used for a large portfolio of detection methods. Applications including Chemiluminescent, colorimetric and nucleic acid and protein detection via colorimetric and fluorescent stains.

10. Software should have automated multi-channel image view and color-coded analysis.
11. Software should have Signal Accumulation Mode (SAM) for easy optimization of exposure time for chemiluminescent detection.
12. Single Software should have image acquisition and image analysis feature.
13. Software should produce customizable reports with data organized as desired, including, Lane and band identification, molecular weight or base pair evaluation. Band sizing and quantification are based on a reference band or quantity standards.

Automated normalization for loading control for total protein as a loading con