

## **Western Blotting Full Solution including Imaging System.**

- 1. Imager must be able to activate and image Stain Free Gels with built in stain Free Wizard. Imager must have built in automated protocols for imaging Stain Free Gels and Stain Free Western Blots. This is unique to Bio-Rad. Total Protein Normalization Tool is built in Image Lab Software for normalizing westerns using total protein.**
- 2. Must include software. This software is compatible with PC and Mac. It is not protected and can be run on many computers without charge. Having software that is compatible with Mac and PC will allow the department to use all computers not only PC for analysis.**
- 3. System must include Chemi/UV Stain-Free Sample tray. This tray will be used to capture images from the following sample types: Stain free gels, stain free blots, EtBr, SYBR Green, Chemiluminescence, and others. Blue Tray for safe dyes and White Tray for white light applications.**
- 4. Imager must have built in hard wired ethernet port to allow user to transfer image files to networked computers.**
- 5. Imager and software must be able imager Stain-free Gel technology provides total protein normalization using Stain Free technology as an alternative to single housekeeping proteins (HKPs). Stain-Free total protein normalization can be used to confirm the consistency of HKPs, or may replace HKPs entirely, simplifying the scientists western blot workflow**
- 6. Software must include the following features:**

**Built in tools for doing Total Protein Normalization using stain free gels. This is excellent tool for publication as many journals are asking for TPN.**

**Optimal Auto Exposure for Chemiluminescence: This produces an image with full dynamic range. This setting is excellent when performing quantitative analysis.**

**Rapid Auto Exposure: Acquires an image with a limited dynamic range using a shorter exposure time.**

**Intense Bands Auto Exposure: Optimizes exposures for all bands.**

**Faint Bands Auto Exposure: Optimizes exposure to faint bands.**

**Signal Accumulation Mode (SAM): Easy optimization for exposure time for Chemiluminescence. One can capture multiple images over a specified time.**

**7. Training will be done on site by Field Application Specialist.**

**8. Built in touch screen. No computer needed.**

**Western Blotting Electrophoresis System Must Include the following:**

- 1. 1ea. Western Blotting System that can blot 4 gels in 3 minutes. End user can use pre hydrated blotting packs, ready to assemble packs or generic Western Blotting supplies.**
- 2. 5ea. boxes of 10 pre packed transfer packs.**
- 3. 1ea mini protein electrophoresis system. This unit must be able to run 4 stain free gels at 1 time.**
- 4. 5ea. low-fluorescence mini pvdf filter paper sets.**
- 5. 5ea. boxes of 10 each stain free protein gels. Gels do not need to be stained to image. Gels need to be able to image in 2 minutes after running.**
- 6. 5ea. 10x running buffer.**
- 7. 1ea. 2x sample buffer**
- 8. 1ea. western blotting protein standard**
- 9. 1ea. All blue protein standard**
- 10. 1ea. Unstained protein standard**
- 11. 1ea. Western blotting substrate- 200mls.**