



Handy Helper

Application Note 37

Imaging Sypro Ruby and Deep Purple stained gels with G:BOX Chemi HR16 & XT16

Introduction

Syngene's G:BOX Chemi HR16/XT16 multi-functional image analysis systems can be used to detect and analyse the sensitive protein stains, Deep Purple™ and Sypro® Ruby. This will benefit users looking for an affordable, time saving method of automating their gel-based proteomics studies.

Advantages of imaging with G:BOX Chemi HR16/XT16

Imaging Deep Purple and Sypro Ruby fluorescent dyes is possible with a G:BOX Chemi HR16/XT16 because their high performance cameras detects a wide range of dyes that have UV excitation peaks. Additionally, since the G:BOX Chemi darkrooms are fitted with a filter wheel, white light pad with optional dual wavelength transilluminator, as well as overhead white and epi-UV light, it is easy to achieve the right illumination conditions for these and many other protein and DNA dyes.

After careful research, Syngene's technical team found using a long wave transilluminator and UV filter produced optimum results for Deep Purple stained gels. For those stained with Sypro Ruby, a medium wave transilluminator and UV filter or medium wave transilluminator with a Syngene blue light converter and Syngene SG emission filter generated the best images.

The commonly used method for detecting Sypro Ruby and Deep Purple stained proteins is laser-based scanners but these are expensive and many cannot detect traditionally used visible proteomic stains, such as Coomassie® Blue or Silver. However, by using the G:BOX Chemi HR16/XT16 with a white light pad and Syngene neutral fielding correction, the system can image both of these dyes with ease.



Figure 1: Syngene's G:BOX Chemi HR16/XT 16 chemiluminescent image analysis system



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