



***SlimWhite* Transilluminator (SW-01)**

White Epi- v.s. Trans- illumination for protein gels

The image compares two illumination methods for protein gels. On the left, Trans-Illumination is shown with a yellow background. The gel is illuminated from below by white light, resulting in a clear, high-contrast image of the protein bands. A diagram below shows light passing through a white plate and a protein gel, with arrows pointing upwards towards the viewer's eye. On the right, Epi-Illumination is shown with a grey background. The gel is illuminated from above. This method shows two issues: 'Bubble issue' where bubbles are visible on the gel surface, and 'Light reflection issue' where light reflects off the surface, obscuring the bands. A diagram below shows light passing through a protein gel and a white plate, with arrows pointing downwards towards the viewer's eye.

Trans-Illumination

Good contrast

Epi-Illumination

Bubble issue

Light reflection issue

Light

Protein Gel

White light

Light

Protein Gel

White plate

SlimWhite v.s. White light converter plate

Item	SlimWhite	White light converter plate above UV
Size	The most compact in the world	Larger and thicker
Cost	Cost effective	Much more expensive
Power consumption	Power-saving (~5 W)	Needed to use UV to excite (~50W)
Uniformity	CV < 5% due to lightguide and diffuser optical design	Non-uniform due to direct fluorescent emission
Weight	1.3 Kg	> 2 Kg
Safety	Non-UV excited, not harmful	UV excited, not confirmed risk
Convenience	Stand-alone use, easy, and space saving	necessary to be used together with a UV box