

LuminolPen™, HRP System

LH03-10/LH03-50

V2.0

Store at 2-8 °C
For Research Use Only

■ Introduction

Western blotting (WB) is the most utilized techniques in current life science research. With the aid of monoclonal or polyclonal antibodies to specific antigen proteins, researchers are able to identify the interested protein signal, quantitatively or qualitatively, on the electroblotting membranes. However, due to the complexities of biological materials and the insufficient specificity of some utilized antibodies, some intriguing WB results are generally observed with unsure molecular weight. To validate a WB result, calculating the molecular weight of the obtained protein signals may be the most straight forward mean. Nevertheless, since most (pre-stained) molecular weight standard markers can not be visualized after the hybridization procedure, many laboratories may align the WB result with the original membrane blot. Such procedure is tedious and may introduce estimation bias. The **LuminolPen™, HRP System** is designed to ease such task. After electroblotting proteins from gels to PVDF or nitrocellulose membranes, just use the LuminolPen to mark the (pre-stained) molecular weight standard markers and perform regular hybridization procedure. During the colorimetric or chemiluminescent development step, the bands of molecular weight standard marker can be visualized and recorded for further analysis. Susceptible protein bands are easily located from the WB result. Additionally, in WB application, the LuminolPen can be used as personal noting or marking as positive control.

Note: The Pentel™ Tradio Stylo TRJ50 is used as container only. The **LuminolPen™, HRP System** is developed by Energenesis Biomedical Co., Ltd. and there is no association with Pentel Co., Ltd.

■ Product Components

LuminolPen™, HRP System (LH03-10)

LuminolPen	100 membranes drawing	1 pen
User's manual		

LuminolPen™, HRP System (LH03-50)

LuminolPen	1,000 membranes drawing	1 pen
User's manual		

■ Safety Information

Please wear gloves, lab coat and goggles while operating. Prevent contact product directly. In case of contacting, wash with large amount of water.

■ Storage

LuminolPen™, HRP System should be stored at 2-8 °C. It should not be frozen. The strength of drawing signal will gradually decrease twelve months after the first usage.

■ Instruction

1. During electrophoresis, run pre-stained molecular weight standard markers in parallel with the samples.
2. **After electrophoresis and membrane blotting procedures**, gently remove the residual solution from the transferred PVDF or nitrocellulose membranes by using filter paper (e.g. Whatman #50). Keep the membranes wet and do not let the membranes over-dry.
3. Mark the visible pre-stained protein bands evenly with the LuminolPen. Generally, one drawing should be enough for delivering strong signals. If necessary, repeatedly marking the same location for stronger signals. The LuminolPen can also be used for personal noting on the margin of membrane.
4. Performing membrane blocking and rest of all necessary procedure for western blotting. No particular care has to be taken.

■ Troubleshooting

Problem	Possible cause	Remedy
No marked signal or the marked signal is too weak	LuminolPen expired	Use a unexpired LuminolPen
	Less ineffective developing system (e.g. colorimetric system) or substrate was employed	Apply more than one drawing on the target area
The marked signal is too strong	Too effective developing substrate was employed	Use a less effective developing substrate

■ Related Visual Protein Products

LumiFlash™ Prime Chemiluminescent Substrate, HRP System	LF01-500	500 mL
LumiFlash™ Ultima Chemiluminescent Substrate, HRP System	LF08-500	500 mL
LumiFlash™ Infinity Chemiluminescent Substrate, HRP System	LF16-500	500 mL
LuminolPen™ EZ, HRP System	LH05-50	1 pen