



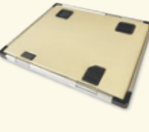
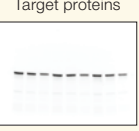



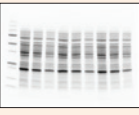

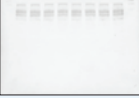

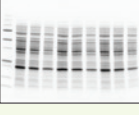

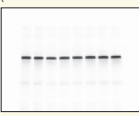
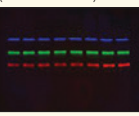



# Traditional vs. Stain-Free Western Blotting

## Traditional Western Blotting

Workflow	Time	Data
<b>Sample Preparation</b>		
1 	Varies	—
<b>Electrophoresis</b>		
2 	~1 hr gel run (additional >1 hr gel prep)	—
<b>Transfer</b>		
3 	1–3 hr	—
<b>Immunodetection</b>		
4 	~5 hr	—
<b>Image Acquisition</b>		
5 	>30 min	Target proteins 
<b>Image Analysis (and Strip and Reprobe)</b>		
6 (Reprobing is often needed for actin or tubulin as a loading control)	~5 hr  • Total time: <b>16 hr</b>	Loading control 

## Bio-Rad Stain-Free Western Blotting

Workflow	Time	Data
<b>Sample Preparation</b>		
1 	Varies	—
<b>Electrophoresis (and Imaging)</b>		
2 TGX Stain-Free Gel, Criterion Cell, ChemiDoc™ Go or ChemiDoc MP Imaging System 	20–30 min	Pre-transfer gel Stain-Free image to check sample integrity and separation quality 
<b>Transfer (and Imaging)</b>		
3 Trans-Blot™ Turbo Transfer System, ChemiDoc Go or ChemiDoc MP Imaging System 	3–10 min	Post-transfer gel Stain-Free image to measure transfer efficiency 
<b>Immunodetection</b>		
4 EveryBlot Blocking Buffer, Clarity™ and Clarity Max Western ECL Substrates, and StarBright™ Blue Fluorescent Secondary Antibodies 	~4 hr	Stain-Free blot image as a loading control 
<b>Image Acquisition</b>		
5 ChemiDoc Go or ChemiDoc MP Imaging System (No need to strip and reprobe) 	10–15 min	Target proteins (chemiluminescence)  or Target proteins (fluorescence) 
<b>Image Analysis</b>		
6 ChemiDoc Go or ChemiDoc MP Imaging System 	Varies  • Total time: <b>5 hr</b>	Total protein normalization (TPN) signal is a good loading control — no stripping and reprobing needed 